EPA REGISTRATION NUMBER 83529-96

PROCESSING REQUEST

Reg. # 83529-96 **Decision # 546287**

Description: Add approved technical source Alt. CSF No. 1

And revised Basic

Electronic Label & Letter (see PPLS):	OR	**Non Electronic Label & Letter** (Scanning required):
☐ Dated:		☐ Dated:

Only one label type should be selected

Other Materials Sent (see jacket):

☒ New CSF(s) Dated: 11/07/2018

☐ Other:

File this coversheet and attached materials in the jacket. It must be well organized and clipped together, NOT STAPLED. Then give the jacket with the coversheet and materials to staff in the Information Services Center (ISC) (Room S-4900). If a jacket is full or only available as an image, please file materials in a new jacket and bring it down to the (ISC). For further information please call 703-605-0716.

Reviewer: BeWanda Alexander

Division: RD

Phone: (703)347-0313 **Date: March 22, 2019**

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

March 21, 2019

Ms. Laura Phelps
Agent
Sharda USA LLC
c/o Wagner Regulatory Associates, Inc.
P.O. Box 640
Hockessin, DE 19707

Subject: CSF Notification per PRN 98-10 – Add approved technical source Alt. CSF # 1 and revised Basic
Product Name: Sharda Flumetsulam 80% WDG
EPA Registration Number: 83529-96
Application Date: November 7, 2018
Decision Number: 546287

Dear Ms. Phelps:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the actions requested fall within the scope of PRN 98-10. The CSFs submitted with your application have been stamped "Notification" and placed in our files.

Please note that the record for this product currently contains the following CSFs:

- Basic CSF dated 11/07/2018
- Alternate CSF 1 dated 11/07/2018

Any CSFs other than those listed above are superseded/no longer valid. If you have any questions, please contact BeWanda Alexander at (703)347-0313 or by email at alexander.bewanda@epa.gov.

Sincerely,

Erik Kraft, Product Manager 24
Fungicide and Herbicide Branch
Registration Division (7505P)
Office of Pesticide Programs

Submitted Electronically via CDX Portal

November 7, 2018

Document Processing Desk (Notif)
Attn: Erik Kraft, PM 24
Registration Division
U.S. Environmental Protection Agency
Office of Pesticide Programs (7505P)
Room S-4900, One Potomac Yard
2777 South Crystal Drive
Arlington, Virginia 22202-4501

WRA
Wagner Regulatory Associates, Inc.
P.O. Box 640
7217 Lancaster Pike, Suite A
Hockessin, Delaware 19707

Subject: **Sharda Flumetsulam 80% WDG; ABN Reptile WDG**
EPA Company No. 83529-96
Notification of addition of approved source of active ingredient to CSF per PR Notice 98-10

Dear Mr. Kraft:

Wagner Regulatory Associates, Inc., as agent for Sharda USA LLC, respectfully submits a Notification to update the CSF file for Sharda Flumetsulam 80% WDG; ABN Reptile WDG (EPA Company No. 83529-96).

1) We would like to add a newly approved (17October2018) Technical source, creating an Alternate#1 CSF.
2) We would also like update the list of production facilities for the Basic CSF.

In support of this request, the following documents are being submitted electronically via the EPA CDX PSP portal.

- Letter from Sharda USA LLC appointing Wagner Regulatory Associates, Inc. as its agent
- Application for Pesticide Registration (8570-1)
- Confidential Statement of Formula (8570-4) Alt#1 –proposed
- Confidential Statement of Formula (8570-4) Basic- current and proposed
- Formulator's Exemption For (8570-27)
- EPA Notice of Technical Registration Approval

This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Thank you in advance for your efforts in reviewing this submission. Please do not hesitate to contact me by email at laura@wagnerreg.com or by phone at 919-353-2439 should you have any questions.

Respectfully submitted,

Laura Phelps
Agent for Sharda USA LLC
Enclosures

DOCUMENTUM

Please read instructions on reverse before complet form. Form Approved OMB No. 2070-0060. Approval expires 05-31-98

EPA United States Environmental Protection Agency Washington, DC 20460

		OPP Identifier Number
	Registration	
	Amendment	
X	Other	

Application for Pesticide - Section I

1. Company/Product Number	2. EPA Product Manager	3. Proposed Classification
83529-96	Erik Kraft	☑ None ☐ Restricted
4. Company/Product (Name): Sharda USA LLC / Sharda Flumetsulam 80% WDG; ABN Reptile WDG	PM# 24	
5. Name and Address of Applicant *(Include Zip Code)* Sharda USA LLC c/o Wagner Regulatory Associates, Inc. P.O. Box 640 Hockessin, DE 19707 ☐ *Check if this is a new address*	6. **Expedited Review.** In accordance with FIFRA Section 3(c)(3)(b)(I), my product is similar or identical in composition and labeling to: EPA Reg. No. Product Name:	

Section - II

- ☐ Amendment - Explain below.
- ☐ Resubmission in response to Agency letter dated _____
- X Notification - Explain below.
- ☐ Final printed labels in response to Agency letter dated _____
- ☐ "Me Too" Application.
- ☐ Other - Explain below.

Explanation: Wagner Regulatory Associates, Inc., as agent for Sharda USA LLC, respectfully submits a Notification to update the CSF file for Sharda Flumetsulam 80% WDG. This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Section - III

1. Material This Product Will Be Packaged In:

Child-Resistant Packaging	Unit Packaging	Water Soluble Packaging	2. Type of Container
☐ Yes* X No	☐ Yes X No	☐ Yes X No	☐ Metal X Plastic ☐ Glass ☐ Paper ☐ Other (Specify) HDPE lined bags
* ***Certification must be submitted***	If "Yes" Unit Packaging wgt. / No. per container	If "Yes" Package wgt / No. per container	

3. Location of Net Contents Information	4. Size(s) Retail Container	5. Location of Label Directions
X Label ☐ Container	1 lb; 5 lbs; 10 lbs; 50 lbs; bulk	X On Label ☐ On Labeling accompanying product

6. Manner in Which Label is Affixed to Product: ☐ Lithograph X Paper glued ☐ Stenciled ☐ Other _____

Section - IV

1. Contact Point *(Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)*

Name	Title	Telephone No. (Include Area Code)
Laura Phelps	Agent for Sharda USA LLC	(919)-353-2439 (laura@wagnerreg.com)

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

6. Date Application Received **(Stamped)**

2. Signature	3. Title	4. Typed Name	5. Date
	Agent for Sharda USA LLC	Laura Phelps	November 7, 2018

This is a reproduction of EPA Form 8570-1 (Rev. 8-94) Previous editions are obsolete.

DOCUMENTUM

Form approved. OMB No. 2070-0060, 2070-0057, 20. 107, 2070-0122, 2070-0164.

United States
Environmental Protection Agency
Washington, DC 20460

Formulator's Exemption Statement

(40 CFR 152.85)

Applicant's Name and Address	EPA File Symbol/Registration Number
Sharda USA LLC c/o Wagner Regulatory Associates, Inc. P.O. Box 640 Hockessin, DE 19707	83529-96
	Product Name Sharda Flumetsulam 80% WDG; ABN Reptile
	Date of Confidential Statement of Formula *(EPA Form 8570-4)* 11/07/2018

As an authorized representative of the applicant for registration of the product identified above, I certify that:

(1) This product contains the following active ingredient(s):

Flumetsulam

(2) Of these, each active ingredient listed in paragraph (4) is present solely as the result of the use of that active ingredient in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another person and meets the requirements of 40 CFR section 158.50(e)(2) or (3).

(3) Indicate by checking (A) or (B) below which paragraph applies:

☑ (A) An accurate Confidential Statement of Formula *(EPA FORM 8570-4)* for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).

OR

☐ (B) The Confidential Statement of Formula (CSF)(EPA Form 8570-4) referenced above and on file with the EPA is complete, current, an accurate and contains the information required on the current CSF.

(4) The following active ingredients in this product qualify for the formulator's exemption.

Source

Active Ingredient	Product Name	Registration Number
Flumetsulam	[redacted]	[redacted]

Product ingredient source information may be entitled to confidential treatment

Signature	Name and Title	Date
	Laura Phelps, Agent	11/07/2018

EPA Form 8570-27 (Rev. 06-2004)

Copy 1 – EPA
Copy 2 - Applicant copy

PROCESSING REQUEST

Reg # 83529-96 Decision # 536764

Description: Adding Basic CSF

Electronic Label & Letter (see PPLS):	OR	Non Electronic Label & Letter (Scanning required):
☐ Dated:		☐ Dated:

Only one label type should be selected

Other Materials Sent (see jacket):

☒ New CSF(s) Dated: 12/15/17 (Basic)

☐ Other:

e this coversheet and attached materials in the jacket. It must be well organized
id clipped together, NOT STAPLED. Then give the jacket with the coversheet and
aterials to staff in the Information Services Center (ISC) (Room S-4900). If a
cket is full or only available as an image, please file materials in a new jacket and
ing it down to the (ISC). For further information please call 703-605-0716.

Reviewer: Lisa Patel

Division: RD

Phone: 703-347-0459 Date: 5/1/2018

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (7505P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

NOTICE OF PESTICIDE:
X Registration
__ Reregistration
(under FIFRA, as amended)

EPA Reg. Number:	Date of Issuance:
83529-96	4/26/18

Term of Issuance:
Unconditional

Name of Pesticide Product:
Sharda Flumetsulam 80% WDG

Name and Address of Registrant (include ZIP Code):

Anna Armstrong
Agent for Sharda USA LLC
c/o Wagner Regulatory Associates, Inc.
PO Box 640
Hockessin, DE 19707

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product when the Agency requires all registrants of similar products to submit such data.

Signature of Approving Official:	Date:
Erik Kraft, Product Manager 24 Fungicide & Herbicide Branch, Registration Division (7505P)	4/26/18

EPA Form 8570-6

2. Make the following label changes before you release the product for shipment:

    - Revise the EPA Registration Number to read, "EPA Reg. No. 83529-96."

3. Submit one copy of the revised final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 12/15/2017

If you have any questions, please contact Lisa Pahel by phone at (703) 347-0459, or via email at pahel.lisa@epa.gov

Enclosure: Product chemistry review dated 03/06/2018, DP445172; Similarity Clinic memo dated 03/06/2018, DP445173

FLUMETSULAM | GROUP 2 | HERBICIDE

Sharda Flumetsulam 80% WDG

ABN: Reptile WDG

An herbicide for broadleaf weed control in field corn and soybeans

ACTIVE INGREDIENT:	WT. BY %
Flumetsulam: N-(2,6-difluorophenyl)-5-methyl-1,2,4-triazolo-[1,5a]-pyrimidine-2-sulfonamide	80.0%
OTHER INGREDIENTS:	20.0%
TOTAL:	100.0%

Contains 0.8 lb. of flumetsulam per lb. of product.

KEEP OUT OF REACH OF CHILDREN

CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand this label, find someone to explain it to you in detail.)

FIRST AID	
IF IN EYES:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
HOTLINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency information concerning this product, call your poison control center at **1-800-222-1222.**	

(Optional referral statements when booklets and container labels are used:
See Panel for First Aid Instructions and booklet for complete Precautionary Statements and Directions For Use.
See label booklet for complete Precautionary Statements, Directions For Use, and Storage and Disposal.
See label booklet for additional Precautionary Statements, Directions For Use, and Storage and Disposal.
See label booklet for complete Directions For Use.)

EPA Reg. No. 83529-OA **EPA Est. No. XXXXX-XX-XXX**

Manufactured for:
Sharda USA LLC
7217 Lancaster Pike, Suite A
Hockessin, Delaware 19707

ACCEPTED
04/26/2018
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 83529-96

Net Contents: _____[Lbs./Kgs.]

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if absorbed through the skin. Causes eye irritation. Avoid contact with skin, eyes, or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove and wash contaminated clothing before reuse.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

Flumetsulam has been identified in groundwater sampling from a field research site under vulnerable conditions. There is the possibility that flumetsulam may leach through soil to groundwater, especially, where soils are coarse and groundwater is near the surface.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of **12 hours**.

Exception: If the product is soil-injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Waterproof gloves
- Shoes plus socks

PRODUCT INFORMATION

Sharda Flumetsulam 80% WDG is a selective herbicide for broadleaf weed control in field corn and soybeans. Make application of **Sharda Flumetsulam 80% WDG** as a pre-plant surface, pre-plant, or pre-emergence treatment in corn and soybeans. Make application of **Sharda Flumetsulam 80% WDG** with water, liquid fertilizer, or impregnated on dry bulk fertilizer. Absorption of **Sharda Flumetsulam 80% WDG** occurs through both shoot and root uptake. Susceptible weeds exposed to **Sharda Flumetsulam 80% WDG** stop growing and either die or become non-competitive with the crop. **Sharda Flumetsulam 80% WDG** will provide residual control of weeds that may emerge after treatment. Adequate soil moisture is necessary for optimal herbicidal activity because uptake and translocation of

Sharda Flumetsulam 80% WDG involves uptake by both roots and/or shoots.

When applications are made under adverse (dry or cold) conditions, or when less susceptible species are treated, reduced activity may be observed and weeds may be suppressed and not controlled. Weed suppression is a visual reduction in weed competition (reduced population, size, and/or vigor) as compared to an untreated area. Improve the level of control by making application of **Sharda Flumetsulam 80% WDG** under favorable growing conditions (i.e., adequate moisture and warmer temperature) and by using a higher labeled use rate in the rate range.

Use Restrictions:

- Do not mix or load this product within 50 feet of any wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas.
- Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Design the pad and maintain it to contain any product spills or equipment leaks, container or equipment rinse or washwater, and rainwater that may fall on the pad. Do not allow surface water to either flow over or from the pad, which means the pad must be self-contained. Slope the pad to facilitate material removal. An unroofed pad will have the capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Maintain containment capacities at all times. These minimum containment capacities do not apply to vehicles delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.
- Do not make application of this product in Nassau and Suffolk Counties in New York State.
- Do not apply by aerial application in New York State.
- **Chemigation:** Do not make application of this product through any type of irrigation system.
- Do not make application of more than a total of 1.4 oz. of **Sharda Flumetsulam 80% WDG** (0.07 lb. active ingredient flumetsulam) per acre per year.
- Do not make application of more than a cumulative total of 0.07 lb. active ingredient flumetsulam per year if using in sequential or tank mix applications with other products.
- **Pre-Harvest Interval:** Do not make application within 85 days before field corn and soybean harvest.
- **Pre-Harvest Interval:** Do not make application within 45 days of field corn forage harvest.
- Do not use flood irrigation to make application or incorporate this product.
- Use this product in a manner that prevents back siphoning in wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.
- **Avoid all direct or indirect contact with non-target plants.** Do not apply near desirable vegetation. Allow adequate distance between target area and desirable plants to minimize exposure.
- Do not graze or feed treated soybean forage, hay or straw to livestock.
- Do not make application of **Sharda Flumetsulam 80% WDG** to sweet corn or popcorn.
- Do not make application when air temperature is near freezing or when freezing conditions are expected for several days following application.
- **Do not make application under conditions that favor runoff or wind erosion of soil containing Sharda Flumetsulam 80% WDG to non-target areas. To prevent off-site movement due to runoff or wind erosion:**
    - Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, settle the soil surface first by rainfall or irrigation.
    - Do not make application to impervious substrates, such as paved or highly compacted surfaces, or frozen or snow-covered ground.
    - Do not make application to soils when saturated with water.
    - Do not use tailwater from the first flood or furrow irrigation of treated fields to treat non-target crops unless at least ½ inch of rainfall has occurred between application and the first irrigation.

Use Precautions:

- Uneven application or uneven incorporation of **Sharda Flumetsulam 80% WDG** can result in inconsistent weed control or crop injury.
- Extended cold, wet conditions (soil temperature below 50°F and excessive rainfall with wet soil conditions) following pre-emergence application of **Sharda Flumetsulam 80% WDG** to field corn which persist during germination and early crop development may result in crop injury. Injury symptoms, including yellowing of leaves and/or crop stunting, are usually temporary and affected corn plants usually recover without affecting yield.
- Dry weather following pre-plant surface or pre-emergence treatments of **Sharda Flumetsulam 80% WDG** may reduce the product's effectiveness. If sufficient activating rainfall or overhead irrigation does not occur within 7 to 10 days following treatment, incorporate the herbicide lightly into the soil using a rotary hoe, harrow, or shallow cultivation. Use a pre-plant incorporated application if furrow irrigation is used or when dry weather is expected following application.

HERBICIDE RESISTANCE

Sharda Flumetsulam 80% WDG contains flumetsulam and is classified in the triazolopyrimidine chemical class as a Group 2 herbicide, Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor.

Herbicide resistance is defined as the inherited ability of a plant to survive and reproduce following exposure to a dose of herbicide normally lethal to the wild type. Any weed population may contain or develop plants that are naturally resistant to **Sharda Flumetsulam 80% WDG** and other Group 2 herbicides. Weed species with acquired resistance to Group 2 herbicides may eventually dominate the weed population if Group 2 herbicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by **Sharda Flumetsulam 80% WDG** or other Group 2 herbicides.

To delay herbicide resistance, consider the below best practices for resistance management:

- Plant into weed-free fields and keep fields as weed-free as possible.
- To the extent possible, use a diversified approach toward weed management. Whenever possible incorporate multiple weed-control practices such as mechanical cultivation, biological management practices, and crop rotation.
- Fields with difficult to control weeds should be rotated to crops that allow the use of herbicides with alternative mechanisms of action or different management practices.
- To the extent possible do not allow weed escapes to produce seeds, roots or tubers. Manage weed seeds at harvest and post-harvest to prevent a buildup of the weed seed-bank.
- Prevent field-to-field and within-field movement of weed seed or vegetative propagules. Thoroughly clean plant residues from equipment before leaving fields.
- Prevent an influx of weeds into the field by managing field borders.
- Identify weeds present in the field through scouting and field history and understand their biology. The weed-control program should consider all of the weeds present.
- Difficult to control weeds may require sequential applications of herbicides with differing mechanisms of action.
- Apply this herbicide at the correct timing and rate needed to control the most difficult weed in the field.
- Use a broad-spectrum soil-applied herbicide with a mechanism of action that differs from this product as a foundation in a weed-control program. Do not use more than two applications of this or any other herbicide with the same mechanism of action within a single growing season unless mixed with an herbicide with another mechanism of action with an overlapping spectrum for the difficult-to-control weeds.
- If resistance is suspected, treat weed escapes with an herbicide with a different MOA or use non-chemical methods to remove escapes.
- Monitor treated weed populations for loss of field efficacy.
- Scout field(s) before and after application.
- Report lack of performance to registrant or their representative.

Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species.

Contact your local sales representative, extension agent, or certified crop advisors to find out if suspected resistant weeds to this MOA have been found in your region. If resistant biotypes of target weeds have been reported, use the application rates of this product specified for your local conditions. Tank mix products so that there are multiple effective mechanisms of action for each target weed.

CROP ROTATION INTERVALS

When tank mixing with other herbicides, follow the crop rotation restrictions on the label of each product used. The following rotational crops may be planted at the indicated interval following application of **Sharda Flumetsulam 80% WDG**:

Crop	Rotation Interval (Months)
Soybeans, Corn (Field, Silage, Seed)	0
Alfalfa, Dry Beans, Lima Beans, Peas, Peanuts, Barley, Oats, Rye, Snap Beans[1], Sweet Potatoes, Wheat	4
Rice	6
Seeding Of Cover Crops[2], Forage Grasses[3], Popcorn, Tobacco	9
Grain Sorghum, Potatoes	12
Cotton, Sunflower, Sweet Corn[4]	18
Sugar Beets, Canola	26*

*Rotation to sugar beets and canola requires a 26-month rotation interval and a successful field bioassay.
[1]Do not plant snap beans grown for commercial seed production.
[2]The following cover crops may be planted for establishment of federal Conservation Reserve Programs and Agricultural Reserve Programs no

sooner than 9 months following application of **Sharda Flumetsulam 80% WDG**: **legumes** including alfalfa, clovers, crownvetch, birdsfoot trefoil, and lespedeza; and **grasses** including big bluestem, little bluestem, switchgrass, Russian wildrye, green needle, smooth bromegrass, Garrison creeping foxtail, canary grass, orchardgrass, intermediate wheatgrass, tall wheatgrass, crested wheatgrass, western wheatgrass, and Indian grass. Some stand reduction or temporary stunting of legume seedlings is possible. However, Sharda USA LLC will not accept responsibility for any crop injury or stand failure of these seeded crops following use in corn or soybeans and the subsequent 9-month rotational crop restriction. Additionally, Sharda USA LLC will not accept responsibility for any crop injury or stand failure of native grasses as a result of inadequate seedbed preparation, erratic germination, lack of seedling vigor, or plant stress from unfavorable environmental conditions.

[3]Do not plant forage grasses grown for commercial seed production.

[4]Certain sweet corn varieties may be planted 10 ½ months after application of up to 1 oz. (0.05 lb. a.i. flumetsulam) of **Sharda Flumetsulam 80% WDG** per acre. This interval applies only to varieties of sweet corn which have been identified as Clearfield® or Optimum GAT®. Contact your local Sharda USA LLC representative for current approved varieties.

FIELD BIOASSAY INSTRUCTIONS

Using typical tillage, seeding practices, and timings for the particular crop, plant several strips of the desired crop variety across the field previously treated with **Sharda Flumetsulam 80% WDG**. Plant the strips perpendicular to the direction in which **Sharda Flumetsulam 80% WDG** was applied. Locate the strips so that different field conditions are encountered, including differences in soil texture, pH, and drainage. If the crop does not show visible symptoms of injury, stand reduction, or yield reduction, the field can be planted with the test crop. If visible injury or stand reduction occurs, do not plant with the test crop, and repeat the bioassay the next growing season.

SPRAY DRIFT MANAGEMENT

The interaction of equipment- and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions. Avoiding spray drift is the responsibility of the applicator. Do not apply when weather conditions favor drift to non-target sites.

Droplet Size: The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly or under unfavorable environmental conditions (see sections on **Wind, Temperature and Humidity**, and **Temperature Inversions**).

Controlling Droplet Size

- **Do not use nozzles that produce a fine-droplet spray.**
- **Volume:** Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure:** Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of Nozzles:** Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation:** Orienting nozzles so that the spray is released parallel to the airstream will produce larger droplets than other orientations and is recommended. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type:** Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

Boom Length

For some use patterns, reducing the effective boom length to less than ¾ of the wingspan or rotor length may further reduce drift without reducing swath width.

Application Height

Do not make applications at a height greater than 10 feet above the top of the tallest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment

When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

Wind

Make application when the wind velocity favors on-target product deposition (approximately 3 to 10 mph). Many factors, including droplet size and equipment type, determine drift potential at any given speed. Do not apply when wind is gusting or wind speed exceeds 15 mph as uneven spray coverage and drift may result. Avoid applications below 2 mph due to variable wind direction and high inversion potential. **Note:** Local terrain can influence wind patterns. Every applicator needs to be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation.

Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions
Do not make applications during a local, low level temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of the smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas
Apply **Sharda Flumetsulam 80% WDG** only when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

Safe Pesticide Handling Procedures
- Calibrate sprayers only with clean water away from the well site.
- Make scheduled checks of spray equipment.
- Assure accurate measurement of pesticides by all operation employees.
- Mix only enough product for the job at hand.
- Avoid over filling the spray tank.
- Do not discharge excess material on soil at a single spot in the field or at the mixing/loading station.
- Triple rinse the container in which product was purchased. Add the rinsate to the spray mix.

MIXING DIRECTIONS

This product can be mixed in accordance with the most restrictive label limitations and precautions. Do not exceed the label dosage rates. This product cannot be mixed with any product containing a label prohibition against such mixing. It is the responsibility of the pesticide user to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Sharda Flumetsulam 80% WDG – Alone
1. Fill the tank with ½ of the total amount of water or liquid fertilizer needed for the load.
2. Begin agitation.
3. Add the required amount of **Sharda Flumetsulam 80% WDG** for acreage being treated by opening the bottle(s) and measuring directly into the spray tank. Allow the product to fully disperse. If liquid fertilizer is being used as the spray carrier rather than water, pre-mix the **Sharda Flumetsulam 80% WDG** as described below before adding to the spray tank.
4. After product has completely dispersed, add non-ionic surfactants or other adjuvant materials.
5. Continue agitation while filling the spray tank to the required volume.
6. To ensure a uniform spray mixture, continuous agitation is required during application. If product is allowed to settle, thoroughly agitate to resuspend the mixture before spraying. Apply within 24 hours of mixing. Weed control with **Sharda Flumetsulam 80% WDG**, which has been mixed and allowed to stand for more than 24 hours, may be reduced.

Pre-Mixing (Other Products): If pre-mixing is required for other dry or flowable products applied in tank mix combination with **Sharda Flumetsulam 80% WDG**, follow directions for pre-mixing of such products provided in their respective product labels.

Sharda Flumetsulam 80% WDG - Tank Mix
If a broader spectrum of weed control is needed, **Sharda Flumetsulam 80% WDG** may be tank mixed with labeled rates of other products provided (1) the tank mix product is labeled for the timing and method of application for the use site to be treated; (2) tank mixing with **Sharda Flumetsulam 80% WDG** is not prohibited by the label of the tank mix product; and (3) the tank mix combination is compatible as determined by a "jar test" described in the **Tank Mix Compatibility Testing** section.

Tank Mixing Directions:
- Read carefully and follow all applicable use directions, precautions, and limitations on the respective product labels.
- Do not exceed specified application rates for respective products or maximum allowable application rates for any active ingredient in the tank mix.
- Do not tank mix with products containing boron or mix in equipment previously used to apply a product mixture containing boron unless the tank and spray equipment have been adequately cleaned (see **Clean-Out Procedures for Spray Equipment**).
- It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Tank Mix Compatibility Testing: A jar test is recommended prior to tank mixing to ensure compatibility of **Sharda Flumetsulam 80% WDG** and other pesticides. Use a clear glass quart jar with lid and mix the tank mix ingredients in their relative proportions. Invert the

jar containing the mixture several times and observe the mixture for approximately ½ hour. If the mixture balls-up, forms flakes, sludges, gels, oily films or layers, or other precipitates, it is not compatible and the tank mix combination should not be used.

Vigorous, continuous agitation during mixing, filling and throughout application is required for all tank mixes. Sparger pipe agitators generally provide the most effective agitation in spray tanks. To prevent foaming in the spray tank, avoid stirring or splashing air into the spray mixture.

Mixing Order for Tank Mixes:

1. Fill the spray tank to ¼ to ½ of the total spray volume required with water or liquid fertilizer.
2. Start agitation.
3. Add the required amount of **Sharda Flumetsulam 80% WDG** for acreage being treated by opening the bottle(s) and measuring directly into the spray tank.
4. After adding **Sharda Flumetsulam 80% WDG**, add different formulation types in the following order: (1) water soluble packets; (2) any compatibility agent, if required; (3) dry flowables; (4) wettable powders; (5) aqueous suspensions, flowables and liquids. Maintain agitation and fill spray tank to ¾ of total spray volume and add: (6) emulsifiable concentrates; (7) solutions; and (8) adjuvants. Allow time for complete mixing and dispersion after each addition.
5. Finish filling the spray tank. Maintain continuous agitation during mixing, final filling and throughout application.

If application or agitation must be stopped before the spray tank is empty, the materials may settle to the bottom. Settled materials must be resuspended before spraying is resumed. A sparger agitator is particularly useful for this purpose. Settled material may be more difficult to resuspend than when originally mixed.

Clean-Out Procedures for Spray Equipment

1. Drain any remaining spray mixture from the application equipment.
2. Hose down the interior surfaces of the tank while filling the tank ½ full of water.
3. Add household ammonia at a rate of 1 gallon per 100 gallons of water. Recirculate for 5 minutes and spray out part of this mixture for 5 minutes through the boom. Drain tank.
4. Remove all spray nozzles and screens and clean separately.
5. If the spray equipment will be used for pesticide application to crops known to be sensitive to **Sharda Flumetsulam 80% WDG**, repeat steps 1 through 3. Thoroughly clean exterior surfaces of spray equipment.

Note: Rinsate must be disposed of on-site according to label use directions or at an approved waste disposal facility.

Liquid Mixture (Slurry) in a Nurse Tank

Mix **Sharda Flumetsulam 80% WDG** with water in a nurse tank to prepare a liquid slurry concentrate that can be measured and dispensed on a liquid volume basis. This liquid slurry will contain 1 lb. of **Sharda Flumetsulam 80% WDG** (0.80 lb. flumetsulam) per gallon of total solution. Use a nurse tank with an agitation system designed for mixing and dispensing a product as a liquid slurry. The slurry will settle in the tank after standing for a few minutes. To ensure uniformity of the liquid slurry, maintain continuous agitation in the tank or agitate the slurry thoroughly and continuously for at least 10 minutes prior to each dispensing.

To prepare the liquid slurry, initially mix **Sharda Flumetsulam 80% WDG** in a ratio of 1 lb. (0.80 lb. a.i. flumetsulam) of herbicide product per 2 quarts of water. Add sufficient water to bring the mixture to a final liquid volume of 1 gallon per 1 lb. (0.80 lb. a.i. flumetsulam) of **Sharda Flumetsulam 80% WDG** after the **Sharda Flumetsulam 80% WDG** is completely dispersed and uniformly mixed. Before mixing, calibrate the slurry mix tank for various mixing volumes. Refer to the table below when mixing various volumes of liquid slurry.

Amount of Sharda Flumetsulam 80% WDG to Add (Lbs.)	Add Sharda Flumetsulam 80% WDG to the Following Amount of Water (Qts.)	Add Water to Slurry to Obtain Final Mixed Liquid Volume (Gals.)
1	2 (0.5 gal.)	1
5	10 (2.5 gals.)	5
10	20 (5 gals.)	10
20	40 (10 gals.)	20
30	60 (15 gals.)	30

Application in Liquid Fertilizer

Always pre-mix or slurry **Sharda Flumetsulam 80% WDG** with water before adding to liquid fertilizer in spray tanks. Make sure **Sharda Flumetsulam 80% WDG** is completely and uniformly dispersed in water and then add to the spray tank or induction system through a 20 to 35 mesh screen. Add any rinsate to the spray mixture.

When necessary, use a compatibility agent to ensure that **Sharda Flumetsulam 80% WDG** mixes properly. The use of an appropriate compatibility agent is especially important when tank mixing **Sharda Flumetsulam 80% WDG** and other dry flowables, wettable powders, flowables, liquids, aqueous suspensions, or solutions with emulsifiable concentrates in liquid fertilizer. If the emulsifiable

concentrate formulation rises to the surface of the fertilizer as an oil ("oils out"), the oil may combine with the wettable powder, flowable, or suspension to form oily curds (viscous phase) which are difficult to disperse. A jar test, utilizing relative proportions of the tank mix ingredients, is recommended prior to mixing with a large quantity of liquid fertilizer.

Note: See the **Clean-Out Procedures for Spray Equipment** section for directions on cleaning equipment prior to use in crops other than soybeans.

Application with Dry Bulk Fertilizer
Dry bulk fertilizer may be impregnated or coated with **Sharda Flumetsulam 80% WDG**. Application of dry bulk fertilizer impregnated with **Sharda Flumetsulam 80% WDG** provides weed control equal to the same rates of **Sharda Flumetsulam 80% WDG** applied in liquid carriers. Follow label directions for **Sharda Flumetsulam 80% WDG** regarding rates per acre, crops, special instructions, cautions and special precautions. Apply 200 to 700 lbs. of the fertilizer/herbicide mixture per acre. Apply the mixture uniformly to the soil with properly calibrated equipment immediately after blending. Uniform application of the herbicide/fertilizer mixture is essential to prevent possible crop injury. Non-uniform application may also result in unsatisfactory weed control. In areas where conventional tillage is practiced, a shallow incorporation of the mixture into the soil may improve weed control.

Most dry fertilizers can be used for impregnation with **Sharda Flumetsulam 80% WDG**. When coated ammonium nitrate and/or limestone are used alone, do not impregnate with **Sharda Flumetsulam 80% WDG**. These materials will not absorb the herbicide. Blends containing a mixture of ammonium nitrate and/or limestone as part of the fertilizer mixture can be impregnated.

Compliance with all Federal and State regulations relating to blending pesticide mixtures with dry bulk fertilizer, registration, labeling and application are the responsibility of the individual and/or company offering the fertilizer and chemical mixture for sale.

Impregnation: Sharda Flumetsulam 80% WDG must be pre-mixed with water to form a slurry prior to impregnation of dry bulk fertilizer. For best results, use 1 pint of water to properly slurry the material. Make sure **Sharda Flumetsulam 80% WDG** is completely and uniformly dispersed in water. Then add sufficient water to adjust the total volume of the mixture to deliver a spray volume of at least 6 pints per ton of fertilizer. Place nozzles used to spray the **Sharda Flumetsulam 80% WDG** onto the fertilizer to provide uniform spray coverage. Use any closed drum, belt, ribbon or other commonly used dry bulk fertilizer blender.

Calculate amounts of **Sharda Flumetsulam 80% WDG** by the following formula:

$$\frac{2{,}000}{\text{Lb./Acre}} \times \text{1 oz. of Sharda Flumetsulam 80\% WDG} = \text{Quantity of Product per Ton of Fertilizer}$$

Note: Thoroughly clean dry fertilizer blending equipment prior to use with other herbicides. It is important to clean the blender, herbicide spray tank, and spraying apparatus thoroughly. Rinse the sides of the blender and the herbicide tank with water. Clean spraying apparatus prior to preparing fertilizer/herbicide mixtures for crops other than corn or soybeans (see **Clean-Out Procedures for Spray Equipment**). Then, impregnate the rinsate onto a load of dry fertilizer intended for an approved crop. Use a maximum rate of 1 gallon of rinsate per ton of fertilizer. Follow with one to two loads of unimpregnated fertilizer in the blender before switching herbicides. The fertilizer application equipment must be empty, clean, and dry before applying any material to crops other than corn or soybeans.

APPLICATION METHODS

Ground Application
Make application of **Sharda Flumetsulam 80% WDG** in sufficient spray volume to provide uniform coverage using only properly calibrated ground equipment. Apply in a total spray volume of 10 to 40 gals. per acre using low pressure (20 to 40 PSI). Maintain sufficient agitation during mixing and spraying to ensure a uniform spray mixture. To ensure thorough coverage when making application to minimum or no-till soybeans or field corn, make application in a total spray volume of 20 gals. or more per acre.

Precaution:
Emerged soybeans are sensitive to rates of **Sharda Flumetsulam 80% WDG** specified for soil applied treatments. Treatments at soil applied rates made after soybeans have emerged (at cracking or later) will result in severe crop injury.

Band Application: Calculate the amount of herbicide needed for band treatment by the formula:

$$\frac{\text{Band Width in Inches}}{\text{Row Width in Inches}} \times \text{Broadcast Rate per Acre} = \text{Amount needed per Acre of Field}$$

Pre-Plant Soil Incorporated Application: For best results, make application and incorporate **Sharda Flumetsulam 80% WDG** from 0 to 30 days prior to planting field corn or soybeans. Pre-plant incorporated treatments may be made in water, liquid fertilizer, or dry fertilizer. Uniformly incorporate the herbicide treatment into the top 2 to 3 inches of the final seedbed.

Pre-Plant Surface Application: For best results, make application of **Sharda Flumetsulam 80% WDG** alone or in certain tank mixes up to 30 days prior to planting. If weeds are present at the time of treatment, make application of **Sharda Flumetsulam 80% WDG** in a tank mix combination with a non-selective or contact herbicide such as glyphosate. **Sharda Flumetsulam 80% WDG** may provide suppression of annual grasses if there is sufficient rainfall to move the herbicide into the soil before weed germination. Rainfall or overhead sprinkler irrigation is necessary to move **Sharda Flumetsulam 80% WDG** into the weed germination zone. The amount of moisture required following application depends upon existing soil moisture, soil texture and organic matter content. Sufficient water

to moisten the soil to a depth of 2" is adequate. If adequate soil moisture is not received within 7 to 10 days after a pre-plant surface application, shallow cultivate to control established weeds and move the herbicide into the weed germination zone. When adequate soil moisture is received following dry conditions, performance may vary by weed species and the depth of the weed root system in the soil.

Restriction:
Do not move treated soil out of the row or move untreated soil to the surface during planting or weed control will be diminished.

Pre-Emergence Application: Make application at 0.8 – 1 oz. (0.04 – 0.05 lb. a.i. flumetsulam) of **Sharda Flumetsulam 80% WDG** at the time of planting or after planting field corn or soybeans, but before weed emergence. Rainfall or overhead sprinkler irrigation is necessary to move **Sharda Flumetsulam 80% WDG** into the weed germination zone. The amount of moisture required following application depends upon existing soil moisture, soil texture and organic matter content. Sufficient water to moisten the soil to a depth of 2" is adequate. If adequate soil moisture is not received within 7 to 10 days after a pre-plant surface application, shallow cultivate to control established weeds and move the herbicide into the weed germination zone. When adequate soil moisture is received following dry conditions, performance may vary by weed species and the depth of the weed root system in the soil.

Early Pre-Plant Burndown
Make application at 0.8 - 1 oz. (0.04 – 0.05 lb. a.i. flumetsulam) of **Sharda Flumetsulam 80% WDG** per acre in a tank mix with 2,4-D, glyphosate, glufosinate, or other herbicide product labeled for burndown and/or residual weed control in the fall or early spring prior to planting corn or soybeans. The application can be made with ground or aerial application equipment. Make application to crop stubble or tilled soil including fallow beds. This treatment provides early burndown of existing weeds plus residual weed control. For optimal burndown control, make application when weeds are 4" or less in height. For optimal residual control, apply after soil temperature has dropped below 50°F for fall applications. Under most conditions, fields should remain suitably clean before planting, thus avoiding the need for additional burndown weed control. Tank mix **Sharda Flumetsulam 80% WDG** with other products labeled for burndown and/or residue weed control if weeds are present at time of application. Reduced residual (in-crop) weed control may be expected when conditions prevent planting by average (historical) planting date for the area.

Restriction:
Do not make application to frozen soils or snow-covered ground.

Select the most appropriate 2,4-D formulation for tank mixtures. Many 2,4-D products are labeled for use in the fall and in the spring prior to no-till soybean planting. These products can be applied pre-plant or pre-emergence to corn, but labels vary with regard to application timing and planting intervals. Soybeans may be planted following applications of 2,4-D but, depending upon use rates and formulation used, have planting interval restrictions ranging from 7 to 30 days. Always read and follow the 2,4-D product label directions and restrictions before use.
It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Soil Textures
Refer to the table below when rates are based upon coarse, medium, or fine textured soils:

Coarse	Medium	Fine
sand	loam	silty clay loam
loamy sand	silt	sandy clay
sandy loam	silt loam	sandy clay loam
		clay loam
		silty clay
		clay

Use Restrictions:

- Do not use as a pre-emergence application on peat or muck soils as reduced weed control will result.
- Use a lower listed use rate in the rate range where soils have a sand or loamy sand texture throughout the soil profile.
- Do not make application to areas where the soil pH is greater than 7.8 as this may result in unacceptable crop injury.
- Do not make application to soils containing greater than 5% organic matter if the soil pH is below 5.9 as reduced weed control will result.
- **Corn Only:** Use of **Sharda Flumetsulam 80% WDG** on soils with less than 1.5% organic matter may result in crop injury. Make application to fields that contain soils with less than 1.5% organic matter only if the risk of crop injury is acceptable.
- **Corn Only:** If any herbicide with ALS (acetolactate synthase) inhibitor mode of action was applied the previous year, make application of **Sharda Flumetsulam 80% WDG** to corn only if the rotational restrictions to corn for the preceding product have been met.
- **Corn or Soybeans:** Corn or soybeans growing in calcareous soils or on soils with historically high salt content (soil test results for salinity indicating electrical conductivity greater than 1 mmho/cm) may exhibit chlorosis and/or stunting resulting from reduced availability of iron or other micronutrients essential for normal crop vigor and growth. The presence of soil active herbicides, such as **Sharda Flumetsulam 80% WDG**, may cause additional stress under these conditions, resulting in enhanced leaf chlorosis and/or crop stunting. This added stress may retard crop recovery, especially under conditions of limited rainfall. In fields which

contain calcareous or high salt content soils and/or have a history of causing iron chlorosis in soybeans, growers should plant soybean varieties with no sensitivity to iron deficient soils or plant corn hybrids containing the Clearfield® trait. On these type soils, the likelihood of crop injury can also be reduced by using a lower rate in the rate range for the soil type and/or by applying **Sharda Flumetsulam 80% WDG** 10 to 14 days prior to planting.

WEEDS CONTROLLED

Sharda Flumetsulam 80% WDG will not control ALS-resistant biotypes of weeds listed below.

Soil Texture	Sharda Flumetsulam 80% WDG (oz./acre)
Coarse	0.8 - 0.89 (0.04 – 0.045 lb. a.i./A)
Medium or Fine	0.89 - 1.00 (0.045 – 0.05 lb. a.i./A)
Weeds Controlled	
Carpetweed	Pigweed spp.
Chickweed	Purslane, Common
Goosefoot	Shepherd's Purse
Henbit	Sida, Prickly
Lambsquarters, Common	Spurge, Nodding
Mallow, Venice	Spurge, Spotted
Mustard, Wild	Thistle, Russian
Pigweed, Redroot	Velvetleaf
Pigweed, Smooth	Waterhemp spp.[2]
Use Restrictions: • Within soil texture class, use the higher listed use rate in the rate range on soils with >3% organic matter. • Do not make application more than 14 days prior to planting.	
Soil Texture	**Sharda Flumetsulam 80% WDG (oz./acre)**
Coarse	0.89 - 1.00 (0.045 – 0.05 lb. a.i./A)
Medium or Fine	1.14 - 1.33 (0.057 – 0.067 lb. a.i./A)
Weeds Controlled	
Beggarweed, Florida[3]	Poinsettia, Wild
Carpetweed	Puncturevine
Chickweed	Purslane, Common
Cocklebur, Common[3,4]	Pusley, Florida
Goosefoot	Ragweed, Common[3]
Henbit	Ragweed, Giant[1]
Horseweed (Marestail)	Shepherd's Purse
Jimsonweed[3]	Sicklepod[3,4]
Kochia[1]	Sida, Prickly
Ladysthumb	Smartweed, Pennsylvania
Lambsquarters, Common	Spurge, Nodding
Mallow, Venice	Spurge, Spotted
Morningglory sp.[1,4]	Sunflower, Common[3]
Mustard, Wild	Thistle, Russian
Nightshade spp.[3]	Velvetleaf
Pigweed, Redroot	Waterhemp spp.[2]
Pigweed, Smooth	Wormwood, Biennial[1]
Pigweed spp.	
Use Restrictions: • Within soil texture class, use the higher listed use rate in the rate range on soils with >3% organic matter. • On medium and fine textured soils, for best results, make early pre-plant applications up to 30 days prior to planting. • On coarse textured soils, do not make application more than 14 days prior to planting.	

[1]**Partial control:** Consistent control of these weeds may also require a tank mixture with another soil- applied herbicide or the sequential application of a post-emergence herbicide.

[2]**Waterhemp:** For improved control of waterhemp, apply **Sharda Flumetsulam 80% WDG** in tank mix combination with a surface applied acetanilide or dinitroaniline herbicide registered for use in field corn and/or soybeans.

[3]Control of light to moderate infestations: The level of control provided by **Sharda Flumetsulam 80% WDG** on cocklebur, jimsonweed, common ragweed, Florida beggarweed, common sunflower, nightshade, and sicklepod can vary depending upon weed density and soil or environmental conditions. Control of moderate to heavy infestations of these weeds may be variable with satisfactory control of higher populations dependent upon consistent soil moisture. Consistent control of these weeds may also require a tank mixture with another pre-emergence herbicide or the sequential application of a post-emergence herbicide (e.g., control of moderate to heavy infestations of nightshade will be improved by applying **Sharda Flumetsulam 80% WDG** in tank mix combination with a surface-applied acetanilide product.

Sicklepod (soybeans only): Where sicklepod infestations are present, up to 1.33 oz. (0.067 lb. a.i. flumetsulam) of **Sharda Flumetsulam 80% WDG** per acre may be used on all soil textures.

Control of cocklebur, morningglory, jimsonweed, common ragweed, Florida beggarweed, common sunflower, nightshade, and sicklepod may be improved by adhering to the following procedures:

- Thoroughly till moist soil to destroy germinating and emerged weeds.
- Apply a higher rate in the rate range allowed for the soil texture and organic matter content to be treated.
- Plant crop immediately after the last tillage operation. If **Sharda Flumetsulam 80% WDG** is to be applied pre-emergence, apply at planting or immediately afterwards.
- If available, sprinkle irrigate within 2 days after application. Apply ½ - 1" of water depending upon soil texture.
- Weed control may be decreased if irrigation or rainfall does not occur within 7 to 10 days after planting and application. Under these conditions, emerged weeds may be controlled by a uniform shallow cultivation or rotary hoeing.

[1]**Soybeans only:** In mid-Atlantic, mid-south, and southeastern regions of the U.S. where cocklebur, morningglory species and sicklepod infestations are present, apply **Sharda Flumetsulam 80% WDG** at 1.25 - 1.33 oz. per acre (0.063 – 0.067 lb. a.i./A) on all soil textures.

USES

FIELD CORN

Use Restrictions:

- Make a soil applied treatment of organophosphate insecticides in a T-band or a band to avoid potential crop injury.
- Soil insecticides from other classes of chemistry may be applied in-furrow, T-banded, or banded.
- Do not use soil insecticide products that contain terbufos or phorate.
- Do not make application of more than a total of 1.4 oz. of Sharda Flumetsulam 80% WDG (0.07 lb. active ingredient flumetsulam) per acre per year.
- Do not exceed 1.33 oz. of product (0.067 lb. a.i. flumetsulam) per single application.
- Do not apply more than two applications (one pre-emergence and one post-emergence application) per year.
- Pre-Harvest Interval (PHI): Do not make application within 85 days before corn harvest.
- Pre-Harvest Interval (PHI): Do not make application within 45 days of field corn forage harvest.

Post-emergence treatments of any other herbicide containing flumetsulam may be made to corn following a soil application of **Sharda Flumetsulam 80% WDG** provided that the total amount of flumetsulam does not exceed 0.07 lb. active ingredient per acre per year. Corn previously treated with **Sharda Flumetsulam 80% WDG** that is stressed or damaged by conditions such as cold weather, hail, drought, water saturated soil, disease, or insects must not be treated with other herbicides with ALS inhibitor mode of action as further crop injury may result.

Restriction:
Do not make application of **Sharda Flumetsulam 80% WDG** to sweet corn or popcorn.

Post-Emergence Applications for Control of Velvetleaf
Make application of **Sharda Flumetsulam 80% WDG** as a broadcast post-emergence spray at the rate of 0.46 - 0.93 oz. per acre (0.023 – 0.046 lb. a.i./A) to velvetleaf when it is 1 - 8" tall. Make application to field corn from emergence (spike stage) until it is 20" tall or through the V6 stage, whichever occurs first. For optimal control, make application when velvetleaf is less than 8" tall and actively growing. Velvetleaf more than 8" tall may only be suppressed and recover 2 - 3 weeks following application. Do not make application if rainfall is expected within 6 hours after application.

Velvetleaf Height (Inches)	Sharda Flumetsulam 80% WDG (Oz./Acre)	Sharda Flumetsulam 80% WDG (Lb. a.i./Acre)
1 – 3	0.46	0.023
1 – 6	0.7	0.035
1 – 8	0.93	0.047

All post-emergence treatments of **Sharda Flumetsulam 80% WDG** must include a nonionic surfactant at 1 qt. per 100 gals. (0.25% v/v) or a crop oil concentrate at 1 gal. per 100 gals. (1% v/v). Under dry growing conditions, the use of an agriculturally approved sprayable liquid fertilizer or ammonium sulfate, in combination with the nonionic surfactant, crop oil concentrate, or methylated seed oil may enhance control. Use 28%, 30% or 32% urea ammonium nitrate at 2.5% volume/volume (2.5 gals. per 100 gals.), or 2 - 4 lbs. of sprayable ammonium sulfate per acre. Use only surfactants approved for use on food crops.

Restrictions:

- Do not use liquid fertilizer solutions or suspensions as the total carrier because excessive crop injury may occur.
- For best results, do not cultivate within 10 days prior to or after application.

Post-Emergence Applications for Extended Pre-Emergence Control
Make application of **Sharda Flumetsulam 80% WDG** alone or in a tank mix combination of triazine-containing premix products registered for use in corn to provide extended pre-emergence broadleaf weed control of the following from post-emergence applications: lambsquarters, pigweed, waterhemp, velvetleaf, and triazine-resistant varieties of these weed species. Make a broadcast

application from emergence (spike stage) until corn is 20" tall or through the V6 stage, whichever occurs first.

Soil Organic Matter	Sharda Flumetsulam 80% WDG (Oz./Acre)	Sharda Flumetsulam 80% WDG (Lb. a.i./Acre)
Coarse	0.8 – 0.89	0.04 – 0.045
Medium or Fine	0.89 – 1.14	0.045 – 0.057

Make application of **Sharda Flumetsulam 80% WDG** alone as a broadcast soil surface application in a spray volume of 10 - 40 gals. per acre. Use drop nozzles when corn foliage development is sufficient to prevent uniform soil coverage. Use a higher listed use rate in the rate range for soils greater than 3% organic matter.

Restriction: Do not use liquid fertilizer solutions or suspensions as the total carrier because excessive crop injury may occur.

When making application of **Sharda Flumetsulam 80% WDG** in a tank mix with triazine-containing premix products under normal growing conditions, the above-listed weeds that have not emerged at the time of application will have consistent pre-emergence control.

Restriction: Do not exceed the cumulative rate of 0.07 lb. a.i. flumetsulam per acre per crop year.

Spike Stage Application
Make application with water as the carrier from corn emergence (ground cracking stage) up to 2" in height (prior to the first leaf is unfurled). Adequate soil moisture is required for optimum herbicidal activity.

Restriction: During corn emergence, do not make application with liquid fertilizer as severe crop injury may result.

Reduced Rates of Sharda Flumetsulam 80% WDG with Triazine-Containing Pre-Mix Products
Use this only in the states of Colorado, Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. Tank mix reduced rates of **Sharda Flumetsulam 80% WDG** with labeled rates of triazine-containing pre-mix herbicides registered for soil-applied weed control in corn. When tank mixing, do not exceed specified application rates and use only in accordance with the most restrictive precautions and limitations on the respective product labels. These combinations can provide improved control of certain broadleaf weeds not consistently controlled by these triazine pre-mix products. When applied under normal growing conditions, these tank mixes should provide consistent control of velvetleaf, lambsquarters, pigweed species, waterhemp, and triazine-resistant varieties of these species. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

On soils with less than 3% organic matter, tank mix 0.8 oz. (0.04 lb. a.i. flumetsulam) of **Sharda Flumetsulam 80% WDG** per acre with a labeled rate of the triazine pre-mix product. On soils with greater than 3% organic matter, tank mix 0.89 - 1 oz. (0.045 – 0.05 lb. a.i. flumetsulam) of **Sharda Flumetsulam 80% WDG** per acre with a labeled rate of the triazine pre-mix product. Refer to the **Mixing Directions** and **Application Methods** sections to determine the amount of **Sharda Flumetsulam 80% WDG** and total spray volume required for the acreage to be treated.

Sharda Flumetsulam 80% WDG with Clearfield® Corn Varieties
If a hybrid containing the Clearfield® trait is planted, any organophosphate insecticide, including Counter or Thimet, can be applied according to label directions without increasing the likelihood of injury to corn from **Sharda Flumetsulam 80% WDG**. The adverse interaction between Counter or Thimet and **Sharda Flumetsulam 80% WDG does not** occur in corn hybrids containing the Clearfield® trait. Hybrids containing the Clearfield® trait may also be planted to reduce injury to corn from **Sharda Flumetsulam 80% WDG** on soils with less than 1.5% organic matter or pH greater than 7.8.

Corn Planting Depth: When using **Sharda Flumetsulam 80% WDG**, corn must be planted at least 1 ½" deep.

Corn inbred lines grown for hybrid seed production may be injured by **Sharda Flumetsulam 80% WDG**. Thoroughly test inbred lines for crop sensitivity before treating large acreage. While growers are not prohibited from using **Sharda Flumetsulam 80% WDG** on seed corn, to the extent consistent with applicable law, **Sharda USA LLC will not accept responsibility for crop injury arising from the use of Sharda Flumetsulam 80% WDG on field corn grown for seed.**

Burndown Applications in Minimum Tillage or No-Tillage Application
When used either alone or in combination in a burndown application, **Sharda Flumetsulam 80% WDG** with crop oil concentrate will control or suppress the following weeds: marestail, common chickweed, field pennycress, and mustard species.

Sharda Flumetsulam 80% WDG Plus Glyphosate: In minimum-tillage or no-tillage situations where corn is planted directly into a cover crop, stale seedbed, or previous crop residues, **Sharda Flumetsulam 80% WDG** may be tank mixed with contact or non-selective herbicides such as glyphosate. Apply in 10 - 60 gals. of water or liquid fertilizer per acre with ground equipment. Add a nonionic surfactant at 1 - 2 qts. per 100 gals. diluted spray. It is the pesticide user's responsibility to ensure that all products are registered for

the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Sharda Flumetsulam 80% WDG plus 2,4-D: For burndown control of susceptible annual and perennial broadleaf weeds prior to planting corn in reduced tillage systems, apply **Sharda Flumetsulam 80% WDG** in tank mix combination with a 2,4-D herbicide labeled for this use. Apply **Sharda Flumetsulam 80% WDG** in a tank mix with 2,4-D amine or ester and apply in a minimum of 10 gals. of carrier per acre. When tank mixing with 2,4-D, read and follow the manufacturer's label for applicable use directions, application timing, precautions, and limitations before use. **This tank mixture will not control emerged grasses. Sharda Flumetsulam 80% WDG** may provide suppression of annual grasses if there is sufficient rainfall to move the herbicide into the soil prior to weed germination. Timely subsequent rainfall is required for optimal herbicidal activity. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Sharda Flumetsulam 80% WDG Followed by Post-Emergence Applications
Broadleaf weeds not controlled by soil applications of **Sharda Flumetsulam 80% WDG** may be controlled with sequential post-emergence herbicide products such as clopyralid + flumetsulam. Other post-emergence herbicide alternatives for use following soil application of **Sharda Flumetsulam 80% WDG** include dicamba, prosulfuron + primisulfuron-methyl, 2,4-D, atrazine + dicamba, bromoxynil, bromoxynil + atrazine, primisulfuron-methyl, or other post-emergence herbicides registered for use on corn (unless prohibited by the label). It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Follow each manufacturer's label for weeds controlled, applicable use directions, precautions, and limitations before use.

SOYBEAN

Use Restrictions:

- Do not graze or feed treated soybean forage, hay or straw to livestock.
- Do not exceed 1.33 oz. of product (0.067 lb. a.i. flumetsulam) per single application.
- Do not exceed cumulative rate of 0.07 lb. of flumetsulam per acre per year.
- Do not apply more than two applications (one pre-emergence and one post-emergence application) per year.
- If a post-emergence application of **Sharda Flumetsulam 80% WDG** is made following a previous pre-emergence application of **Sharda Flumetsulam 80% WDG**, check to make sure that the cumulative rate of 0.07 lb. of flumetsulam per acre per year is not exceeded. One ounce of **Sharda Flumetsulam 80% WDG** contains 0.050 lb. of flumetsulam. A post-emergence application of **Sharda Flumetsulam 80% WDG** at 0.125 oz. per acre contains 0.00625 lb. of flumetsulam.

Burndown Applications in Minimum Tillage or No-Tillage Application
When used either alone or in combination in a burndown application, **Sharda Flumetsulam 80% WDG** with crop oil concentrate, will control or suppress the following weeds: marestail, common chickweed, field pennycress, and mustard species.

Sharda Flumetsulam 80% WDG Plus Glyphosate: In minimum-tillage or no-tillage situations where soybeans is planted directly into a cover crop, stale seedbed, or previous crop residues, tank mix **Sharda Flumetsulam 80% WDG** with contact or non-selective herbicides such as glyphosate. Make application in 10 - 60 gals. of water or liquid fertilizer per acre with ground equipment. Add a nonionic surfactant at 1 - 2 qts. per 100 gals. diluted spray. Make application prior to, during (behind the planter), or after planting, but before the crop emerges. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Sharda Flumetsulam 80% WDG Plus 2,4-D: For burndown control of susceptible annual and perennial broadleaf weeds before planting soybeans in reduced tillage systems, make application of **Sharda Flumetsulam 80% WDG** in tank mix combination with a 2,4-D herbicide labeled for this use. Make application of **Sharda Flumetsulam 80% WDG** in a tank mix with 2,4-D amine or ester and apply in a minimum of 10 gals. of carrier per acre. When tank mixing with 2,4-D, read and follow the manufacturer's label for applicable use directions, application timing, precautions, and limitations before use. **This tank mixture will not control emerged grasses. Sharda Flumetsulam 80% WDG** may provide suppression of annual grasses if there is sufficient rainfall to move the herbicide into the soil prior to weed germination. Timely subsequent rainfall is required for optimal herbicidal activity. For soybeans, delay planting of the crop a minimum of 15 - 30 days following application to avoid potential crop injury from 2,4-D residues in the soil. Follow the specified rates, specific planting delays, and other use precautions and limitations on the label of the 2,4-D product used. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Sharda Flumetsulam 80% WDG Plus Metribuzin + Chlorimuron-ethyl: Tank mix **Sharda Flumetsulam 80% WDG** with metribuzin + chlorimuron-ethyl for broad spectrum weed control. Make application of the tank mix as a pre-plant surface application in minimum or no tillage systems, pre-plant incorporated, or pre-emergence treatment. Make application of **Sharda Flumetsulam 80% WDG** at

the rate of 0.8 - 1.25 oz. per acre (0.04 – 0.063 lb. a.i./A) with metribuzin + chlorimuron-ethyl (refer to the product label for use rates and application information). It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Restriction: Do not make application to soil with a pH greater than 6.8.

Sharda Flumetsulam 80% WDG Plus Cloransulam-methyl: Tank mix **Sharda Flumetsulam 80% WDG** with cloransulam-methyl for broad spectrum weed control. Make application of the tank mix as a pre-plant surface application in minimum or no tillage systems, pre-plant incorporated, or pre-emergence treatment. Make application of **Sharda Flumetsulam 80% WDG** at the rate of 0.8 - 1.33 oz. per acre (0.04 – 0.067 lb. a.i./A) with cloransulam-methyl (refer to the product label for use rates and application information). It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Post-Emergence Applications for Control of Teaweed (prickly sida) in Soybeans
Make application at 0.125 oz. (0.006 lb. a.i. flumetsulam) of **Sharda Flumetsulam 80% WDG** per acre as a post-emergence application for control of teaweed (prickly sida) in soybeans. The treatment can be made with ground or aerial application equipment. Make application to soybeans from the 1st to 5th trifoliate leaf stage of growth. Make applications to actively growing teaweed when it has no more than 2 true leaves (2" maximum height). Weeds too large for optimum control will be suppressed, but may recover after 2 - 3 weeks. Do not spray at the cotyledon stage. Post-emergence applications of **Sharda Flumetsulam 80% WDG** may result in temporary chlorosis, transient leaf yellowing and/or growth retardation (stunt) of the soybean leaves. These effects will be evident for 5 - 7 days after application to soybeans under stress. Under favorable growing conditions, the crop will quickly recover.

Restrictions:
- Do not apply if rainfall is expected within 6 hours after application.
- For best results, do not cultivate within 10 days before or after application.
- If a post-emergence application of **Sharda Flumetsulam 80% WDG** is made following a previous pre-emergence application of **Sharda Flumetsulam 80% WDG**, check to make sure that the cumulative rate of 0.07 lb. of flumetsulam per acre per year is not exceeded. One ounce of **Sharda Flumetsulam 80% WDG** contains 0.050 lb. of flumetsulam. A post-emergence application of **Sharda Flumetsulam 80% WDG** at 0.125 oz. per acre contains 0.00625 lb. of flumetsulam.
- Do not use liquid fertilizer as total carrier for post-emergence application.

Post-Emergence Weed Control: Make application to actively growing weeds. Unfavorable conditions such as drought, or near freezing temperatures before, at, or following application, may result in reduced weed control. The degree of control will depend upon weed susceptibility and growing conditions at the time of treatment.
Use of Surfactants: A nonionic surfactant at 0.25% v/v (1 qt. per 100 gals.) must be included in all post-emergence applications of **Sharda Flumetsulam 80% WDG**. Use a surfactant with at least 80% active ingredient of which at least 50% is actual nonionic surfactant. Under extremely dry growing conditions, an agriculturally approved sprayable liquid fertilizer together with the nonionic surfactant may enhance control. Use 28%, 30%, or 32% urea ammonium nitrate at 2.5% v/v (2.5 gals. per 100 gals.).

Restrictions:
- **Do not** use liquid fertilizer solutions or suspensions as the total carrier because excessive crop injury may occur.
- Use only agriculturally approved surfactants.

Tank Mix: Make application of **Sharda Flumetsulam 80% WDG** alone or in tank mix combination with other post-emergence broadleaf and/or grass soybean herbicides registered for post-emergence application in soybean unless tank mixing is specifically prohibited by the label of the tank mix product. Apply **Sharda Flumetsulam 80% WDG** only with glyphosate products labeled for post-emergence application on soybean varieties designated as containing the Roundup Ready® gene. Depending upon the product chosen, the performance of the grass control product may be adversely affected through herbicide antagonism. For best results, delay application of the post-emergence grass control product for three days after applying **Sharda Flumetsulam 80% WDG**.

Sharda Flumetsulam 80% WDG Plus Cloransulam-methyl: Tank mix **Sharda Flumetsulam 80% WDG** with cloransulam-methyl and make application using ground or aerial application equipment as a post-emergence application to soybeans any time from full emergence of the first trifoliate leaf up to the 50% flowering stage of growth. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Precautions:
- Making this tank mix application before full emergence of the first trifoliate leaf may cause temporary yellowing or chlorosis of soybeans.
- Additional tank mix partners may cause other effects regardless of the application timing.

Making a post-emergence treatment of **Sharda Flumetsulam 80% WDG** plus cloransulam-methyl may provide residual soil activity on

broadleaf weeds excluding sicklepod. Length and effectiveness of residual activity will vary and is dependent upon timeliness of rainfall following application (0.5" or more is needed within 1 week), degree of crop/weed canopy interception of the spray, and remaining reserve of viable ungerminated weed seeds on the soil surface.

Make application at 0.12 oz. (0.006 lb. a.i. flumetsulam) of **Sharda Flumetsulam 80% WDG** per acre plus cloransulam-methyl (refer to the product label for use rates and application information). A second application at 0.12 oz. (0.006 lb. a.i. flumetsulam) of **Sharda Flumetsulam 80% WDG** plus cloransulam-methyl, may be made 14 days after the first. **Sharda Flumetsulam 80% WDG** plus cloransulam-methyl may be applied alone or in tank mix combination with other post-emergence herbicides. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Restrictions:

- Do not apply more than a total of 0.24 oz. of **Sharda Flumetsulam 80% WDG** (0.012 lb. a.i. flumetsulam) per acre.
- Make application when weeds are actively growing and before weeds exceed specified growth stages (number of true leaves per plant); see table below.
- Applications to larger weeds or to weeds under stress may result in unsatisfactory control.
- A crop oil concentrate at 1.2 gals. per 100 gals. of spray mixture (1.2% v/v), a nonionic surfactant at 1 - 2 pts. per 100 gals. of spray mixture (0.125 - 0.25% v/v), or nonionic surfactant plus urea ammonium nitrate at 2.5 gals. per 100 gals. (2.5% v/v), or ammonium sulfate at 2 lbs. per acre (8.5 - 17 lbs. per 100 gals. of spray mixture) is required to be included in the tank mix of **Sharda Flumetsulam 80% WDG** plus cloransulam-methyl.

Precautions:

- Crop oil concentrate may increase the potential for crop injury in soybeans.

The following weeds are controlled by a tank mix of **Sharda Flumetsulam 80% WDG** plus cloransulam-methyl. These two products do not control known ALS-resistant biotypes of listed weeds.

Weeds	Leaf Number at Application (Optimum to Maximum)	Maximum Height (Inches)
CONTROLLED		
Cocklebur	2 – 8	6
Dayflower, Asiatic Dayflower, Marsh Dayflower, Spreading	2 – 6	–
Horseweed (Marestail)	2 – 4	6
Jimsonweed		4
Mallow, Venice		<3
Marshelder	4 – 6	10
Morningglory (Annual)[1] Entireleaf Ivyleaf Palmleaf Pitted Red Smallflower Tall	2 – 4	6
Mustard, Wild[2]		4
Ragweed Common Giant	4 – 8 4 – 6	10
Sicklepod[3]	cotyledon – 1	<2
Smartweed, Pennsylvania	2 – 4	6
Sunflower, Common	4 – 8	12
Teaweed (Prickly Sida)	1 – 2	2
Velvetleaf	2 – 4	6
SUPPRESSED		
Burcucumber	2 – 4	6
Canada Thistle	–	10
Copperleaf, Hophornbeam	1 – 2	4
Hemp Sesbania	cotyledon – 1	<1
Nutsedge, Yellow	–	8
Pigweed spp.	1 – 2	<1

Redroot Smooth Spiny		

[1]Make application before morningglory begins to send out runners.
[2]For optimum control, make application before wild mustard plants exceed 4" in diameter.
[3]Reduced control will result if applications are made to sicklepod plants that are beyond the 1-leaf stage of growth. Additional herbicide treatment may be required to control sicklepod that germinates after application.

Sharda Flumetsulam 80% WDG Followed by Post-Emergence Applications
Broadleaf weeds not controlled by soil applications of **Sharda Flumetsulam 80% WDG** in soybeans may be controlled with a sequential post-emergence herbicide products such as cloransulam-methyl, bentazon, acifluorfen, lactofen, fomesafen, chlorimuron-ethyl, bentazon + acifluorfen, or other post-emergence herbicides registered for use on soybeans (unless prohibited by the label). For enhanced control of sicklepod, make application of cloransulam-methyl post-emergence following application of **Sharda Flumetsulam 80% WDG**. Follow the manufacturer's labels for application rates, weeds controlled, additional use directions, precautions, and limitations before use.
It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Sharda Flumetsulam 80% WDG as a Foundation Herbicide in Roundup Ready® Soybeans
Sharda Flumetsulam 80% WDG at 0.8 - 1.33 oz. per acre (0.04 – 0.067 lb. a.i./A) can be used as a foundation soil herbicide in a planned sequential program with any glyphosate formulation labeled for use in Roundup Ready soybeans. Use of **Sharda Flumetsulam 80% WDG** as a soil foundation to control or suppress key broadleaf weeds listed in the soil applied section of this label will allow more optimal timing of a glyphosate post-emergence treatment. In addition, because of the residual weed control provided by **Sharda Flumetsulam 80% WDG**, subsequent post-emergence herbicide applications may be unnecessary.
It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal.
PESTICIDE STORAGE: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, or feed. Store in original container and out of the reach of children, preferably in a locked storage area. Handle and open container in a manner as to prevent spillage. If the container is leaking or material spilled for any reason or cause, carefully sweep material into a pile. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Dispose of pesticide as directed below. In spill or leak incidents, keep unauthorized people away.
PESTICIDE DISPOSAL: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.
CONTAINER HANDLING:
Non-Refillable Plastic and Metal Containers (Capacity Equal to or Less Than 50 Pounds): Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration, or by other procedures approved by State and local authorities. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.
Non-Refillable Plastic and Metal Containers (Capacity Greater Than 50 Pounds): Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration, or by other procedures approved by State and local authorities. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.
Non-Refillable Plastic and Metal Containers, e.g., Intermediate Bulk Containers [IBC] (Size or Shape Too Large to be Tipped, Rolled or Turned Upside Down): Non-refillable container. Do not reuse or refill this container. Clean container promptly after emptying the contents from this container into application equipment or mix tank and before final disposal using the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and

dispose of in a sanitary landfill or by incineration, or by other procedures approved by State and local authorities. Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

Non-Refillable Paper or Plastic Bags, Fiber Sacks including Flexible Intermediate Bulk Containers (FIBC) or Fiber Drums With Liners: Non-refillable container. Do not reuse or refill this container. Completely empty paper or plastic bag, fiber sack or drum liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. Offer for recycling, if available, or dispose empty paper or plastic bag, fiber sack or fiber drum and liner in a sanitary landfill or by incineration, or by other procedures approved by State and local authorities.

Refillable Fiber Drums With Liners: Refillable container (fiber drum only). Refilling Fiber Drum: Refill this fiber drum with this herbicide only. Do not reuse this fiber drum for any other purpose. Cleaning before refilling is the responsibility of the refiller. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. Disposing of Fiber Drum and/or Liner: Do not reuse this fiber drum for any other purpose other than refilling (see preceding). Cleaning the container (liner and/or fiber drum) before final disposal is the responsibility of the person disposing of the container. Offer the liner for recycling if available or dispose of liner in a sanitary landfill, or by incineration. Do not burn, unless allowed by State and local ordinances. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner. To clean the fiber drum before final disposal, completely empty the fiber drum by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. Then offer the fiber drum for recycling if available or dispose of in a sanitary landfill or by incineration, or by other procedures approved by State and local authorities.

All Other Refillable Containers: Refillable container. Refilling Container: Refill this container with this herbicide only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. Check for leaks after refilling and before transporting. Disposing of Container: Do not reuse this container for any other purpose other than refilling (see preceding). Cleaning the container before final disposal is the responsibility of the person disposing of the container. To clean the container before final disposal, use the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration, or by other procedures approved by State and local authorities. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

Outer Foil Pouches of Water Soluble Packets (WSP): Non-refillable container. Do not reuse or refill this container. Offer for recycling if available or, dispose of the empty outer foil pouch in the trash as long as WSP is unbroken. If the outer pouch contacts the formulated product in any way, the pouch must be triple rinsed with clean water. Add the rinsate to the spray tank and dispose of the outer pouch as described previously.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER!

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

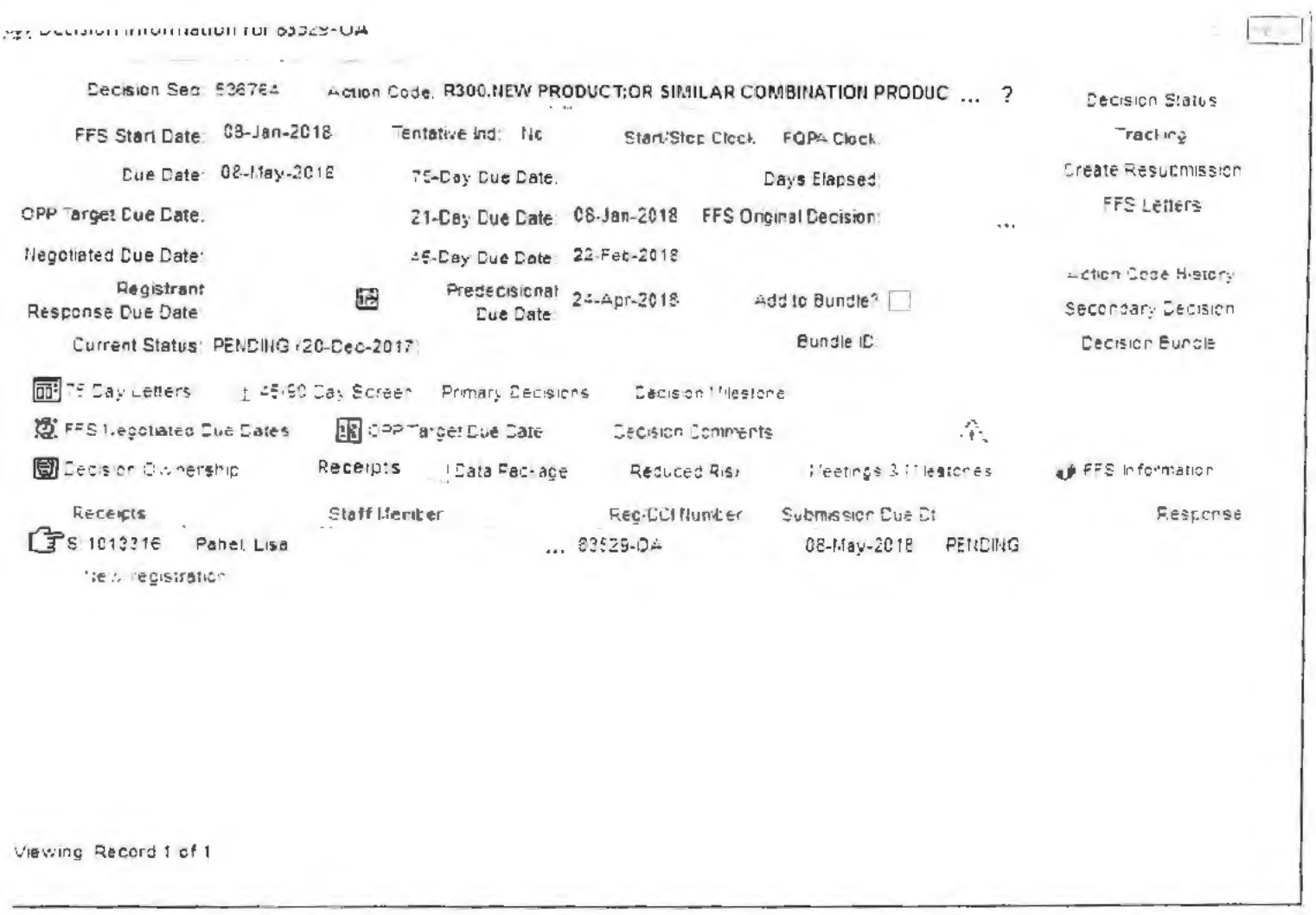
The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Sharda USA LLC or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Sharda USA LLC and Seller harmless for any claims relating to such factors.

Sharda USA LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or Sharda USA LLC and Buyer and User assume the risk of any such use. To the extent consistent with applicable law, Sharda USA LLC, MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, neither Sharda USA LLC nor Seller shall be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SHARDA USA LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SHARDA USA LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

Sharda USA LLC and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of Sharda USA LLC.

All trademarks are the property of their respective owners.


Decision Information for 83529-DA
Decision Seq: 536764
Action Code: R300.NEW PRODUCT;OR SIMILAR COMBINATION PRODUC ... ?
Decision Status
FFS Start Date: 08-Jan-2018
Tentative Ind: No
Start/Stop Clock
FQPA Clock
Tracking
Due Date: 08-May-2018
75-Day Due Date:
Days Elapsed:
Create Resubmission
OPP Target Due Date:
21-Day Due Date: 08-Jan-2018
FFS Original Decision:
FFS Letters
Negotiated Due Date:
45-Day Due Date: 22-Feb-2018
Registrant Response Due Date
Predecisional Due Date: 24-Apr-2018
Add to Bundle?
Action Code History
Secondary Decision
Current Status: PENDING (20-Dec-2017)
Bundle ID:
Decision Bundle
75 Day Letters
45/60 Day Screen
Primary Decisions
Decision Milestone
FFS Negotiated Due Dates
OPP Target Due Date
Decision Comments
Decision Ownership
Receipts
Data Package
Reduced Risk
Meetings & Milestones
FFS Information
Receipts
Staff Member
Reg/DCI Number
Submission Due Dt
Response
S: 1013316
Pahel, Lisa
... 83529-DA
08-May-2018
PENDING
New Registration
Viewing Record 1 of 1

E-SUBMISSION

83529-04

Memorandum

Date: 12/22/17

To: PM 24, Regulatory Manager

From: Information Services Branch, ITRMD

Your receipt of this data submission is not an indication that MRIDs for the enclosed studies have been posted to OPPIN.

We expect that it will be approximately 5 days from the above date before the study-level data is available in OPPIN.

This is a:
- [x] fully accepted submission
- [ ] partially accepted submission
- [ ] rejected submission

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

December 22, 2017

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

WAGNER REGULATORY ASSOCIATES, INC.
SHARDA USA LLC
7217 LANCASTER PIKE, SUITE A
PO.BOX : 640
HOCKESSIN, DE 19707

Report of Analysis for Compliance with PR Notice 11-03

Thank you for your submittal of 15-DEC-17. Our staff has completed a preliminary analysis of the material. The results are provided as follows:

Your submittal was found to be in full compliance with the standards for submission of data contained in PR Notice 11-03. A copy of your bibliography is enclosed, annotated with Master Record ID's (MRIDs) assigned to each document submitted. Please use these numbers in all future references to these documents. Thank you for your cooperation. If you have any questions concerning this data submission, please raise them with the cognizant Product Manager, to whom the data have been released.

Submitted Electronically

December 15, 2017

Document Processing Desk (REGFEE)
Attn: Erik Kraft, PM 24
Registration Division
U.S. Environmental Protection Agency
Office of Pesticide Programs (7505P)
Room S-4900, One Potomac Yard
2777 South Crystal Drive
Arlington, Virginia 22202-4501

WRA

Wagner Regulatory Associates, Inc.
P.O. Box 640
7217 Lancaster Pike, Suite A
Hockessin, Delaware 19707

Subject: **Sharda Flumetsulam 80% WDG; ABN Reptile WDG**
EPA Company No. 83529
Application to register a new end-use product - (PRIA R300)

Dear Mr. Kraft:

Wagner Regulatory Associates, Inc., as agent for Sharda USA LLC, is requesting registration of the above referenced product. In support of this request, the following documents and studies are being submitted electronically via the EPA CDX PSP portal.

- Letter from Sharda USA LLC appointing Wagner Regulatory Associates, Inc. as its agent
- Application for Pesticide Registration (8570-1)
- Confidential Statement of Formula (8570-4)
- Certification with Respect to Citation of Data (8570-34)
- Data Matrix (8570-35), internal and public versions
- Data Transmittal Document
- Formulators Exemption (8570-27)
- Data as outlined in the transmittal document
- Draft label
- Certification with Respect to Label Integrity
- Receipt confirming payment of fee for PRIA R300 - $1,582.

Thank you in advance for your efforts in reviewing this submission. Please do not hesitate to contact me by email at anna@wagnerreg.com or by phone at 302-510-0039 should you have any questions.

Respectfully submitted,

Anna Armstrong
Agent for Sharda USA LLC

Enclosures

DATA TRANSMITTAL DOCUMENT

1. **Name and Address of Submitter**
Sharda USA LLC
c/o Wagner Regulatory Associates, Inc.
P.O. Box 640, 7217 Lancaster Pike, Suite A
Hockessin, DE 19707
EPA Company No. 83529

2. **Regulatory Action In Support Of Which This Package Is Submitted**
Application for Registration
Sharda Flumetsulam 80% WDG
ABN: Reptile WDG

3. **Transmittal Date**
December 15, 2017

4. **List of Submitted Studies**

50456801	Flumetsulam 80% WDG - Product Identity and Composition, Description of Materials, Description of Formulation Process, Preliminary Analysis, Discussion of Impurities and Certified Limits. OPPTS: 830.1550, 830.1600, 830.1650, 830.1670, 830.1700, 830.1750
50456802	Flumetsulam 80% WDG Physical-Chemical Properties and Accelerated Storage Study, Study No. E17122, OPPTS: 830.1800, 830.6302, 830.6303, 830.6304, 830.6313, 830.6317, 830.6320, 830.7000, 830.7300, 830.7520
50456803	Flumetsulam 80% WDG Reducing / Oxidizing Test, Study No. E17165, OPPTS: 830.6314
50456804	Flumetsulam 80% WDG - Product Chemistry – Group B: Request for Waiver for Certain Physical / Chemical Properties Data, OPPTS: 6313; 6315; 6316; 6319; 6321; 7050; 7100; 7200; 7220; 7520; 7550; 7560; 7570; 7840; 7860; 7950

Company Name: Sharda USA LLC

Company Official: Anna Armstrong
Authorized Agent


Signature

Company Contact: Anna Armstrong
Authorized Agent

(302) 510-0039 / anna@wagnerreg.com
Phone / Email

Form approved. OMB No. 2070-0060, 2070-0057, 2070-0107, 2070-0122, 2070-0164

EPA

United States
Environmental Protection Agency
Washington, DC 20460

Formulator's Exemption Statement

(40 CFR 152.85)

Applicant's Name and Address	EPA File Symbol/Registration Number
Sharda USA LLC c/o Wagner Regulatory Associates, Inc. P.O. Box 640 Hockessin, DE 19707	83529-XX
	Product Name Sharda Flumetsulam 80% WDG; ABN Reptile WDG
	Date of Confidential Statement of Formula *(EPA Form 8570-4)* 12/15/2017

As an authorized representative of the applicant for registration of the product identified above, I certify that:

(1) This product contains the following active ingredient(s):

Flumetsulam

(2) Of these, each active ingredient listed in paragraph (4) is present solely as the result of the use of that active ingredient in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another person and meets the requirements of 40 CFR section 158.50(e)(2) or (3).

(3) Indicate by checking (A) or (B) below which paragraph applies:

☑ (A) An accurate Confidential Statement of Formula *(EPA FORM 8570-4)* for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).

OR

☐ (B) The Confidential Statement of Formula (CSF)(EPA Form 8570-4) referenced above and on file with the EPA is complete, current, an accurate and contains the information required on the current CSF.

(4) The following active ingredients in this product qualify for the formulator's exemption.

Source		
Active Ingredient	Product Name	Registration Number
Flumetsulam	[redacted]	[redacted]

Product ingredient source information may be entitled to confidential treatment

Signature	Name and Title	Date
	Anna Armstrong, Agent	12/15/2017

EPA Form 8570-27 (Rev. 06-2004)

Copy 1 – EPA
Copy 2 - Applicant copy

Form Approved OMB Nos. 2070-0060; 2070-0057; 2070-0107; 2070-0122; 2070-0164

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
1200 Pennsylvania Avenue, N.W.
WASHINGTON, D.C. 20460

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Certification with Respect to Citation of Data

Applicant's/Registrant's Name, Address, and Telephone Number	EPA Registration Number/File Symbol
Sharda USA LLC, P.O. Box 640, Hockessin, DE 19707	83529-XX
Active Ingredient(s) and/or representative test compound(s) Flumetsulam	Date December 15, 2017
General Use Pattern(s) (list all those claimed for this product using 40 CFR Part 158) Terrestrial food Crops	Product Name Sharda Flumetsulam 80% WDG; ABN Reptile WDG

NOTE: If your product is a 100% repackaging of another purchased EPA-registered product labeled for all the same uses on your label, you do not need to submit this form. You must submit the Formulator's Exemption Statement (EPA Form 8570-27).

☐ I am responding to a Data-Call-In Notice, and have included with this form a list of companies sent offers of compensation (the Data Matrix form should be used for this purpose).

SECTION I: METHOD OF DATA SUPPORT (Check one method only)

☐ I am using the cite-all method of support, and have included with this form a list of companies sent offers of compensation (the Data Matrix form should be used for this purpose).	☑ I am using the selective method of support (or cite-all option under the selective method), and have included with this form a completed list of data requirements (the Data Matrix form must be used).

SECTION II: GENERAL OFFER TO PAY

(Required if using the cite-all method or when using the cite-all option under the selective method to satisfy one or more data requirements)

☑ I hereby offer and agree to pay compensation, to other persons, with regard to the approval of this application, to the extent required by FIFRA.

SECTION III: CERTIFICATION

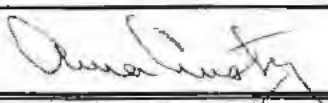
I certify that this application for registration, this form for reregistration, or this Data-Call-In response is supported by all data submitted or cited in the application for registration, the form for reregistration, or the Data-Call-In response. In addition, if the cite-all option or cite-all option under the selective method is indicated in Section I, this application is supported by all data in the Agency's files that (1) concern the properties or effects of this product or an identical or substantially similar product, or one or more of the ingredients in this product; and (2) is a type of data that would be required to be submitted under the data requirements in effect on the date of approval of this application if the application sought the initial registration of a product of identical or similar composition and uses.

I certify that for each exclusive use study cited in support of this registration or reregistration, that I am the original data submitter or that I have obtained the written permission of the original data submitter to cite that study.

I certify that for each study cited in support of this registration or reregistration that is not an exclusive use study, either: (a) I am the original data submitter; (b) I have obtained the permission of the original data submitter to use the study in support of this application; (c) all periods of eligibility for compensation have expired for the study; (d) the study is in the public literature; or (e) I have notified in writing the company that submitted the study and have offered (i) to pay compensation to the extent required by sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA, and (ii) to commence negotiations to determine the amount and terms of compensation, if any, to be paid for the use of the study.

I certify that in all instances where an offer of compensation is required, copies of all offers to pay compensation and evidence of their delivery in accordance with sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA are available and will be submitted to the Agency upon request. Should I fail to produce such evidence to the Agency upon request, I understand that the Agency may initiate action to deny, cancel or suspend the registration of my product in conformity with FIFRA.

I certify that the statements I have made on this form and all attachments to it are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

Signature	Date	Typed or Printed Name and Title
	12/15/2017	Anna Armstrong, Agent

EPA Form 8570-34 (12-2003) Electronic and Paper versions available. Submit only Paper version.

Form Approved OMB No. 2070-0060

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
401 M Street, S.W.
WASHINGTON, D.C. 20460

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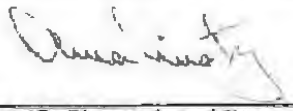
DATA MATRIX

Date: December15, 2017	EPA Reg No./ File Symbol: 83529-XX	Page 1 of 2
Applicant's/Registrant's Name and Address: Sharda USA LLC c/o Wagner Regulatory Associates, Inc. P.O. Box 640 Hockessin, DE 19707	Product: **Sharda Flumetsulam 80% WDG; ABN Reptile WDG**	
Ingredient: Flumetsulam		

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
PRODUCT SPECIFIC					
830.1550, 830.1600, 830.1650, 830.1670, 830.1750	Product Identity & Composition/ Description of Materials used to Produce the Product/Description of Formulation Process/Discussion of Formation and Toxicity of Impurities. Certified Limits	50456801	Sharda USA LLC	Own	
830.1700	Preliminary Analysis	50456801	Sharda USA LLC	Own	
830.1800	Enforcement Analytical Method	50456802	Sharda USA LLC	Own	
830.6302	Color	50456802	Sharda USA LLC	Own	
830.6303	Physical State	50456802	Sharda USA LLC	Own	
830.6304	Odor	50456802	Sharda USA LLC	Own	
830.6313	Stability to Normal & Elevated Temperatures	50456804	Sharda USA LLC	Own	
830.6314	Oxidation/Reduction	50456803	Sharda USA LLC	Own	
830.6315	Flammability	50456804	Sharda USA LLC	Own	
[illegible].6316	Explodability	50456804	Sharda USA LLC	Own	
.6317	Storage Stability	50456802	Sharda USA LLC	Own	
830.6319	Miscibility	50456804	Sharda USA LLC	Own	
830.6320	Corrosion Characteristics	50456802	Sharda USA LLC	Own	
830.6321	Dielectric breakdown voltage	50456804	Sharda USA LLC	Own	
830.7000	pH	50456802	Sharda USA LLC	Own	
830.7050	UV/Visible Light Absorption	50456804	Sharda USA LLC	Own	
830.7100	Viscosity	50456804	Sharda USA LLC	Own	
830.7200	Melting Point	50456804	Sharda USA LLC	Own	
830.7220	Boiling Point	50456804	Sharda USA LLC	Own	
830.7300	Density/Relative Density	50456802	Sharda USA LLC	Own	
830.7370	Dissociation Constant in Water	50456804	Sharda USA LLC	Own	
830.7520	Particle Size, fiber length & diameter distribution	50456804	Sharda USA LLC	Own	

Signature	Name and Title	Date
	Anna Armstrong, Agent	December 15, 2017

EPA Form 8570-35 (9-97) Electronic and Paper versions available. Submit only Paper version.

Agency Internal Use Copy

Form Approved OMB No. 2070-0060

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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DATA MATRIX

Date: December15, 2017		EPA Reg No./ File Symbol: 83529-XX	Page 2 of 2
Applicant's/Registrant's Name and Address:	Sharda USA LLC c/o Wagner Regulatory Associates, Inc. P.O. Box 640 Hockessin, DE 19707	Product: **Sharda Flumetsulam 80% WDG; ABN Reptile WDG**	

Ingredient: Flumetsulam

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
830.7550; 7560; 7570	Partition Coefficient (n-Octanol/Water)	50456804	Sharda USA LLC	Own	
830.7840; 7860	Water Solubility/Solubility in Organic Solvents	50456804	Sharda USA LLC	Own	
830.7950	Vapor Pressure	50456804	Sharda USA LLC	Own	
870.1100 870.1200 870.1300 870.2400 870.2500 870.2600	Acute Oral Toxicity Acute Dermal Toxicity Acute Inhalation Toxicity Primary Eye Irritation Primary Dermal Irritation Dermal Sensitization	CITE ALL	Dow AgroSciences LLC, Indianapolis, IN	Pay	

Signature	Name and Title	Date
	Anna Armstrong, Agent	December 36, 2017

EPA Form 8570-35 (9-97) Electronic and Paper versions available. Submit only P...

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

OFFICE OF PESTICIDE PROGRAMS
REGISTRATION DIVISION (7505P)

~~CONTAINS CONFIDENTIAL BUSINESS INFORMATION~~

DP Barcode No.: D445172 File Symbol No.: 83529-OA Decision No.: 536764
PC Code: 129016 Company Name: Sharda USA LLC
Food Use: Yes Action Code: R 300 Product Name: Sharda Flumetsulam 80% WDG

DATE OUT: March 6, 2018

SUBJECT End-Use Product Chemistry Review
Product Name: Sharda Flumetsulam 80% WDG

FROM: Bruce F. Kitchens, Chemist
Product Chemistry Team
Chemistry, Inerts and Toxicology Assessment Branch/RD (7505P)

TO: RM #24, Erik Kraft/Lisa Pahel
Fungicide and Herbicide Branch
Registration Division (7505P)

INTRODUCTION:

The registrant, Sharda USA LLC, is submitting an application to register the proposed end-use product, Sharda Flumetsulam 80% WDG. The active ingredient in this product is Flumetsulam at a label nominal concentration of 80.00% a.i. This product is intended for use as an herbicide end-use product. In addition, the registrant states that the proposed product is identical or substantially similar in composition to EPA Reg. No. 62719-277, Python WDG. In support of this request, the registrant is submitting a proposed basic Confidential Statement of Formula (CSF) dated 15 Dec 2017; a draft label and product chemistry data contained in MRID#s 504568-01 thru 504568-04. The Chemistry, Inerts and Toxicology Assessment Branch (CITAB) has been asked to review this submission.

SUMMARY OF FINDINGS:

1. Name of Active Ingredient: Flumetsulam (80.00% a.i.)

2. Has the registrant claimed substantial similarity to a registered product?

[X] Yes; [ ] No; [ ] NA, if yes give the registration number of the cited product

EPA Reg. No. 62719-277

3. All of the source materials of the active ingredient are derived from registered sources- [X] Yes [ ] No

4. All inert ingredients have been screened by IIAB and are approved for the proposed labeled uses.

5. Confidential Statement of Formula:

[X] Basic - Dated: 15 Dec 2017 Resubmitted Dated: N/A
[ ] Alternate – Dated: Resubmitted Dated: N/A

Alternate CSF complies with 40 CFR 152.43
[ ] Yes [ ] No [X] NA

6. Product label

a. Ingredient statement: Nominal concentration of AI listed on CSF concurs with product label (PR Notice 91-2).
[X] Yes, if not, explain below:

Is the sub statement in compliance with PR Notice 97-6 (inert ingredient vs other ingredient)?
[X] Yes; [ ] No; if not, explain below

Metallic equivalent: [ ] Yes [X] NA
Soluble arsenic: [ ] Yes [X] NA
Isomeric ratios: [ ] Yes [X] NA
Acid Equivalent: [ ] Yes [X] NA

b. Health related sub statements: Product contains?

Petroleum distillate at > 10%: [ ] Yes; [ ] No; [X] NA
Methanol at > 4%: [ ] Yes; [ ] No; [X] NA
Sodium nitrate/sodium nitrite [ ] Yes; [ ] No; [X] NA

c. Physical chemical hazard statement: Product label requires a statement per 40 CFR §156.78 for flammability, explosive potential or electric insulator breakdown?
[ ] Yes [X] No

Is the sub statement in compliance with PR Notice 98-6 (Total Release Fogger)?
[ ] Yes, [ ] No; [X] NA; if not, explain below

d. Label requires an additional Storage and Disposal statement: [ ] Yes [X] No, if yes explain below

7 Group A: Product Chemistry Data

CITAB's determination of the acceptability for the proposed product is listed in the tables below.

Guideline No.	Study Title		Data submitted		CITAB's Assessment of Data	MRID Nos.
			Yes	No		
830.1550	Product Identity & Composition		X		A	504568-01
830.1600	Description of materials used to produce the product		X		A	504568-01
830.1650	Description of formulation process		X		A	504568-01
830.1670	Discussion on the formation of impurities		X		A	504568-01
830.1700	Preliminary analysis			X	N/A	
830.1750	Certified limits (158.350)	Standard certified limits	X		A	see basic csf 12/15/17
		Proposed Limits				
		Justification for wider limits				
830.1800	Enforcement analytical method		X		A	504568-02

A = Acceptable, N = Not Acceptable, G = Data Gap, W = Waiver Request, I = In Progress, NA = Not Applicable; U = Upgradeable.

8 Group B:

Guideline No.	Study Title	Value or Qualitative Description	CITAB's Assessment of Data	MRID Nos.
830.6303	Physical State	The test substance is a brown solid with a mild odor.	A	504658-02
830.6314	Oxidation/ Reduction	The test substance was compatible when mixed with ammonium dihydrogen phosphate, iron, zinc, ammonium dichromate, and calcium nitrate. Water and the test substance became a solid after 24 hours.	A	504658-03
830.6315	Flammability	Product does not contain flammable components	N/A	
is 830.6316	Explodability	Product does not contain explosive components.	N/A	
830.6317	Storage stability	The active ingredient concentration remained stable after storage at 54°C for 14 days.	A	504658-02
830.6320	Corrosion Characteristics	The test substance remained a brown sold after storage at 54°C for 14 days. The test substance was not corrosive to copper, iron, polyethylene and zinc. The test substance is corrosive to aluminum.	A	504658-02
830.7000	pH	7.0 @ 20°C	A	504568-02
830.7100	Viscosity	Product is a solid.	N/A	
830.7300	Density (units)	0.85 ± 0.01 g/ml (tap)	A	504568-02

A = Acceptable, N = Not Acceptable, G = Data Gap, W = Waiver request, NA = Not applicable, I = In progress; U = Upgradeable

CONCLUSIONS:

CITAB has reviewed the product chemistry data submitted for the proposed end-use product and has concluded that:

A. Substantial similarity to the cited product (Reg. No. 62719-277) from Product chemistry view point

[X] Similar
[ ] Not similar, give reasons
[ ] Identical
[ ] Not identical
[ ] Not applicable

B. Confidential Statement of formula

1. Basic CSF (dated 15 Dec 2017)
[X] Acceptable
[ ] Not Acceptable
[ ] Not Applicable

If not acceptable provide the reasons

2. Alternate CSF
[ ] Acceptable
[ ] Not Acceptable
[X] Not Applicable

If not acceptable give reasons

C. Group A Product Chemistry Data

[X] Acceptable
[ ] Not acceptable
[ ] Acceptable with the exception of Guideline(s): (provide the guideline number & explain)
[ ] Not required
[ ] Data cited

D. Group B Product chemistry data

[X] Acceptable
[ ] Not acceptable
[ ] Acceptable with the exception of Guideline(s): (provide the guideline number & explain)
[ ] Not required
[ ] Data cited

E. Product Label/Draft Label

Recommendations – Yes [ ]; No [ ]

If yes, give recommendations below.

Note: Please add additional remarks if necessary for each section

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460
OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION
OFFICE OF PESTICIDE PROGRAMS REGISTRATION DIVISION (7505P)

DP BARCODE No.: D445764 **FILE SYMBOL No.**: 83529-OA (screen) **DECISION No.**: 536764
PC Code: 129016 **Company Name:** Sharda USA LLC
FOOD Use: Yes **ACTION CODE**: R 300 **PRODUCT NAME**: Sharda Flumetsulam 80% WDG

DATE OUT: January 22, 2018

SUBJECT: Completeness Check Screen for an End-Use Product

Product Name: Sharda Flumetsulam 80% WDG

FROM: Bruce Kitchens, Chemist
Product Chemistry Team
Chemistry, Inerts and Toxicology Assessment Branch/RD (7505P)

Bruce Kitchens
1/22/18

TO: RM #24, Eric Kraft/Lisa Pahel
Fungicide and Herbicide Branch
Registration Division (7505P)

Company Name: Sharda USA LLC

Active Ingredient: Flumetsulam (80.0% a.i.)

MRID Nos.: 504568-01, 504568-02, 504568-03 and 504568-04

CONCLUSIONS:

Deficiencies: No
(If there are deficiencies they are indicated below each heading as Note 1, Note 2 Etc).

Group A: All required data submitted.

Group B: All required data submitted.

CSF: Basic CSF dated 15 Dec 2017

Product label: Yes

Note to PM: If the deficiencies are found in the screen results, please inform the registrant and return to me the corrected deficiencies in response to 10-day letter, so that it can be attached to the original bean, if the data package is still in CITAB. New Bean is required in case the bean has been closed by CITAB. Thank you.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY AND
POLLUTION PREVENTION

OFFICE OFPESTICIDE PROGRAMS
REGISTRATION DIVISION

06/MAR/2018

Subject:	Name of Pesticide Product:	Sharda Flumetsulam 80% WDG
	EPA Reg. No. /File Symbol:	83529-OA
	DP Barcode:	D445173
	Decision No:	536764
	Action Code:	R300
	PC Codes:	129016 (flumetsulam)

From: Eugenia McAndrew, Biologist Eugenia McAndrew
Chemistry, Inerts and Toxicology Assessment Branch
Registration Division (7505P)

Through: P.V. Shah, Ph.D., Chief
Chemistry, Inerts and Toxicology Assessment Branch
Registration Division (7505P)

P.V. Shah 3/6/2018

To: Lisa Pahel, Risk Management Team 24
Fungicide and Herbicide Branch
Registration Division (7505P)

Applicant: Sharda USA LLC
c/o Wagner Regulatory Associates, Inc.
P.O. Box 640
Hockessin, DE 19707

FORMULATION FROM LABEL:

Active Ingredient(s):	% by wt.
Flumetsulam	80
Other ingredients:	20
Total:	100

ACTION REQUESTED: Similarity determination for 83529-OA, proposed product, and 62719-277, cited product.

BACKGROUND: Sharda USA LLC has applied for registration of Sharda Flumetsulam 80% WDG, EPA File Symbol 83529-OA, claiming to be substantially similar to Python WDG, EPA Reg. No. 62719-277. Both products contain 80% flumetsulam, atrazine. The submission includes a basic CSF dated December 15, 2017, label, data matrix and company letter.

The registrant is using the cite-all method of data support to satisfy the acute toxicity data requirements. After searching the OPP electronic databases we were unable to locate any acute toxicity data or memos pertaining to the cited product.

RECOMMENDATIONS:

1. We compared the basic CSFs and labels of the proposed product, 83529-OA, and the cited product, 62719-277, and determined that the two products are substantially similar.

2. Since no acute toxicity data were submitted for the cited product, we cannot assign an acute toxicity profile.

3. Based on the label for 62719-277, the signal word is CAUTION. We recommend that the proposed product use the same precautionary labeling and first aid statements as the cited product.

4. The proposed basic CSF submitted for 83529-OA must be reviewed and accepted by the product chemists in the Chemistry, Inerts and Toxicology Assessment Branch.

Ciarlo, Timothy

From: Ciarlo, Timothy
Sent: Tuesday, January 09, 2018 10:01 AM
To: Balan, Aswathy
Subject: RE: 21-Day Screen Failure

Great – thanks, Aswathy. I'll transfer the jacket.

Tim

From: Balan, Aswathy
Sent: Tuesday, January 09, 2018 9:58 AM
To: Ciarlo, Timothy <Ciarlo.Timothy@epa.gov>
Subject: RE: 21-Day Screen Failure

I see from the emails between the contractors and the registrant, they have sent the inert information to CITAB. So the PM team just have to confirm with CITAB the approval of the inert. So please transfer the jacket to the PM.

Thanks,
Aswathy

Aswathy Balan, Biologist
Fungicide and Herbicide Branch
OCSPP/OPP/RD
Environmental Protection Agency
Ph: 703-347-0510

From: Ciarlo, Timothy
Sent: Tuesday, January 09, 2018 9:49 AM
To: Balan, Aswathy <Balan.Aswathy@epa.gov>
Subject: RE: 21-Day Screen Failure

It was an inerts failure. The File Symbol is 83529-OA. Do you want me to hang on to the jacket until Thursday? Or should I pass it off to the PM team? The 21-day screening period ended 1/5/8/18.

Thanks,
Tim

From: Balan, Aswathy
Sent: Tuesday, January 09, 2018 9:46 AM
To: Ciarlo, Timothy <Ciarlo.Timothy@epa.gov>
Subject: RE: 21-Day Screen Failure

Hi Tim,

I am working from home today and tomorrow, will be back in office only on Thursday. Can you let me know the registration number for this action and the reason for failure? Let me see if I can contact the registrant to get the issues fixed.

Thanks for letting me know about this failure and your assistance.
Aswathy

Aswathy Balan, Biologist
Fungicide and Herbicide Branch
OCSPP/OPP/RD
Environmental Protection Agency
Ph. 703-347-0510

From: Ciarlo, Timothy
Sent: Tuesday, January 09, 2018 9:33 AM
To: Balan, Aswathy <Balan.Aswathy@epa.gov>
Subject: 21-Day Screen Failure

Hi Aswathy,

Are you in today? I logged a PRIA failure in the 21-day room yesterday. Are you still the point person for this?

Thanks!
Tim

Tim Ciarlo
Entomologist
Environmental Protection Agency
OCSPP/OPP/RD/IVB1
Email: Ciarlo.Timothy@epa.gov
Phone: 703-347-8082

21-Day Screen Completed by Contractor

21-Day Expires on 1-5-18

Jacket # 83529-0A
MRID# 504568

Content Screen: Recommend to Pass/Fail

11-3 Review: Pass/Fail/NA

Overall Status: Recommend to Pass/Fail

Transfer This Jacket to:

DAN KENNY

PRIA 3 – 21 Day Content Screen Review Worksheet

(EPA/OPP Use Only)

September 2012

21 Day Screen Start Date: 12-15-17

Experts In-Processing Signature: BB Date 12-21-17 Fee Paid: Yes ✓

Division management contacted on issues No _____ Yes _____ Date _____

EPA Reg. Number: 83529-OA	EPA Receipt Date: 12-15-17

	Items for Review			Yes	No	N/A*
1	**Application Form** (EPA Form 8570-1) signed & complete including package type			X		
2	**Confidential Statement of Formula** all boxes completed, form signed, and dated (EPA Form 8570-4)			X		
	a) All inerts, including fragrances, approved for the proposed uses (see Footnote A)	yes	no X			
3	**Certification with Respect to Citation of Data** (EPA Form 8570-34) completed and signed (N/A if 100% repack)			X		
	Certificate and data matrix consistent			X		
	If applicant is relying on data that are compensable, is the offer to pay statement included. (see Footnote B)	yes	no			
	If applicable, is there a letter of Authorization for exclusive use only.					
4	**Formulator's Exemption Statement** (EPA Form 8570-27) completed and signed (N/A if source is unregistered or applicant owns the technical)			X		
5	**Data Matrix** (EPA Form 8570-35) both internal and external copies (PR 98-5) completed and signed (N/A if 100% repack)			X		
	a) Selective Method (Fee category experts use)	yes X	no			
	b) Cite-All (Fee category experts use)					
	c) Applicant owns all data (Fee category experts use)					
6	**5 Copies of Label (Electronic labels on CD are encouraged and guidance is available)**			X		
7	**Is the data package consistent with PR Notice 86-5**			X		
8	**Notice of Filing included with petitions**					X

9	**If applicable for conventional applications, <u>reduced risk rationale</u>**			
	<u>Required Data</u> and/or data waivers. See Footnote C.			
10	a) List study (or studies) not included with application			

Comments:

Documentation: Pass

- Certification w/Respect to Citation of Data and Formulators Exemption missing signatures, revised 12/27.
- All required forms are complete.

InerAs: Fail

- InerAs not approved, see InerA status form.

11-3: Pass

- MRID 50456-8

Status: Fail

- Rejection letter on (Hi)
- MS 01/03/18

* N/A – Not Applicable

Footnotes

A. During the 21 day initial content review, all CSFs will be reviewed to determine whether all inerts listed, including fragrances, are approved for the proposed uses or have an application pending with the Agency. If an unapproved inert with no application pending with the Agency is identified, the applicant must either 1) resolve the inert issue by, for example, removing the inert, substituting it with an approved inert, submitting documentation that EPA approved the inert for the proposed pesticidal uses, correcting mistakes on the CSF, etc. or 2) provide the data to support OPP approval of the inert or 3) withdraw the application. Removing or substituting an inert ingredient will require a new CSF and may require submission of data. All information, forms, data and documentation resolving the inert issue must have been received by the Agency or the application withdrawn within the 21 day period, otherwise, the Agency will reject the application as described below.

To successfully complete this aspect of the 21 day initial content screen, applicants are **strongly encouraged** to verify that all inert ingredients have been approved for the application's uses or have an application pending with the Agency **even if a product is currently registered** by consulting the inert Web site and if the inert is not approved nor has an application pending with the Agency, to **obtain the necessary inert approval prior to submitting an application to register a pesticide product containing that inert ingredient.** Some inert ingredients are no longer approved for food uses or certain types of uses. The name and/or CAS number on a CSF must match the name and CAS number on this web site. Simple typographical errors in the name or CAS number have resulted in processing delays.

If an inert is not listed on the inert ingredient web site and the applicant believes that the inert has been approved, the applicant should contact the Inert Ingredient Assessment Branch (IIAB) at inertsbranch@epa.gov and resolve the issue. Copies of the correspondence with IIAB resolving the issue should accompany the application. All new inerts except PIP inerts are reviewed by IIAB. The IIAB should also be contacted for any questions on what supporting data needs to be submitted for and the Agency's inert review process. Questions on PIP inerts should be directed to the Chief of Microbial Pesticides Branch.

When a brand, trade, or proprietary name of an inert ingredient is listed on a CSF, additional information such as an alternate name of the inert, CAS number or other information must also be included to enable the Agency to determine if it has been approved. Each component of an inert mixture (including a fragrance) must be identified. In some cases, the supplier of the mixture or fragrance may need to provide this information to the Agency. Prior to the Agency's receipt of an application, applicants must arrange with a proprietary mixture or fragrance supplier to provide the component information to the Agency or promptly upon EPA's request. If the inert ingredients in a proprietary blend (including fragrances) cannot or are not identified or provided within the 21-day content review period, the Agency will reject the application.

During the 21 day content review, applicants should submit information to the individual identified by the Agency when the applicant is informed of an unapproved inert.

Unapproved Inerts Identified on CSFs

All applications except conventional new products and PIPs

Once an unapproved inert is identified on a CSF, the Agency will contact the applicant with the following options:

1. Correct the application by, for instance, correcting the inert's identity or CAS number, providing documentation that the inert has been approved, or removing the unapproved inert from the CSF or replacing it with one that is approved for the application's uses; or

2. Provide the required information necessary to identify an inert approval application that is pending with the Agency; or

3. Submit the information and data needed for the Agency to approve the unapproved inert. If this option is selected and implemented, the Agency may request an extension in the PRIA decision review timeframe to accommodate the inert review/approval process;

4. Withdraw the application (the Agency retains 25% of the full fee for the fee category estimated); or

If none of these options is selected and implemented by the applicant within the 21 day content review period, the Agency will reject the application and retain 25% of the full fee of the category identified.

Conventional New Product Applications

When the Registration Division identifies an unapproved inert on a CSF with an application for a new product that the applicant has not identified as requiring an inert approval (R300 or R301), it will contact the applicant with the following options:

1. Correct the application by, for instance, correcting the inert's identity or CAS number, providing documentation that the inert has been approved, or removing the unapproved inert from the CSF or replacing it with one that is approved for the application's uses; or

2. Submit the information and data needed for the Agency to approve the unapproved inert, including any required petition to establish or amend a tolerance or exemption from a tolerance. (This option may change the PRIA category for the application, which could require a longer decision review time and a larger fee. If additional fees are due, they must be received by the Agency within the 21 day content review period.)

3. Withdraw the application (the Agency retains 25% of the full fee for the fee category estimated); or

If none of the above options is selected and implemented during the 21-day content-review period, the Agency will reject the application and retain 25% of the appropriate fee for the new product-inert approval category.

PIP Applications

When the Biopesticide and Pollution Prevention Division identifies an unapproved inert on a PIP CSF and a request to approve the inert does not accompany the application, it will contact the applicant with the following options:

1. Correct the application by, for instance, correcting the spelling or name of the inert to that in 40 CFR 174, or providing documentation that the inert has been approved; or

2. Submit the information and data needed for the Agency to approve the unapproved inert. If an inert ingredient tolerance exemption petition is required, the petition must be received by the Agency and the B903 fee paid within the 21 day period. If this option is selected and implemented, the Agency will discuss harmonizing the timeframe for both actions.

3. Withdraw the application (the Agency retains 25% of the full fee for the fee category estimated); or

If none of the above options is selected and implemented during the 21 day content review period, the Agency will reject the application and retain 25% of the fee.

B. A policy on documentation of offers to pay is still being developed, however, for a me-too or fast track (similar/identical) new product, R300 or A530, an application without the necessary authorizations of offers to pay will be placed into either R301 or A531. The Agency recommends that authorizations of offers to pay be submitted with other PRIA applications to avoid delays in the Agency's decision.

C. Biopesticide applicants are advised to contact the Agency and discuss study waivers prior to submitting their application to the Agency. Documentation of such discussions should be submitted with the study waiver.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

MS. ANNA ARMSTRONG
WAGNER REGULATORY ASSOCIATES, INC.
SHARDA USA, LLC
PO BOX 640, 7217 LANCASTER PIKE, SUITE A
HOCKESSIN, DE 19707

RE: Application for Registration dated: 20-DEC-2017
Date Fee Payment: 15-DEC-2017
Product Name: SHARDA FLUMETSULAM 80% WDG
EPA Registration Number: 83529-OA
Decision Number: D-536764

Dear Registrant:

The Agency has completed its initial contents screen of your application pursuant to Section 33(f)(4)(B) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended the Pesticide Registration Improvement Renewal Act. The Agency has determined that your application did not pass the initial contents screen and therefore must be rejected.

Specifically, the following items were missing or improperly formatted: Inert Ingredients listed on the Confidential Statement of Formula were not found in the Agency database.

In addition, in our attempts to clarify the above issue you failed to provide corrections in a timely manner. You were contacted by an Agency contractor via e-mail on December 26, 2017 and December 27, 2017 and via telephone on January 3, 2017.

Furthermore, pursuant to FIFRA Section 33(b)(2)(G) the Agency must retain 25% of the registration service fee. Any future submissions to the Agency will be considered a new application and subject to the full registration service fee and another initial contents screen of all necessary fees, forms, data, and draft labeling.

Sincerely,

XXXXXXXX, Director
Office of Pesticide Programs

Sheahin, Marc

From: Anna Armstrong <Anna@wagnerreg.com>
Sent: Wednesday, January 03, 2018 11:53 AM
To: Sheahin, Marc
Cc: Anna Armstrong
Subject: RE: Application for EPA Reg.# 83529-OA - Confidential
Attachments: 83529-XX Basic CSF - 15Dec2017.docx.pdf

Hi Marc,
Per our discussion – please find the revised CSF. Thanks so much for all of your help.
Take care and have a good day!
Anna

From: Sheahin, Marc [mailto:Sheahin.Marc@epa.gov]
Sent: Wednesday, December 27, 2017 1:09 PM
To: Anna Armstrong <Anna@wagnerreg.com>
Subject: RE: Application for EPA Reg.# 83529-OA - Confidential

Anna,

Thank you for the revised forms. I will wait to hear from the manufacturer as that inert (even with the revised spelling) is not in the Agency database. I can work with the inert branch to get it added if I receive a letter with full compositional informational including manufacturer constituent names, CAS numbers, and weight/weight percent composition.

Thanks,
Marc

From: Anna Armstrong [mailto:Anna@wagnerreg.com]
Sent: Wednesday, December 27, 2017 12:38 PM
To: Sheahin, Marc <Sheahin.Marc@epa.gov>
Cc: Anna Armstrong <Anna@wagnerreg.com>
Subject: RE: Application for EPA Reg.# 83529-OA - Confidential

Hi Marc,
I hope you had a nice holiday.
Thank you for your efforts on this review. I have attached the revised forms – although it is strange the signatures were on my copies....I apologize about that. I also found a typo on the inert ingredient [redacted] on the CSF – so I did correct that. It should be [redacted] – not [redacted] Please replace the CSF with the one attached.

We had worked with the manufacturer before submitting this registration to confirm they had sent information into the Agency for approval of the inert ingredient in question. My understanding is that information has been sent to the Agency, but I will ask the manufacturer to send directly to you as well.

Thanks and take care,
Anna

Inert ingredient information may be entitled to confidential treatment

From: Sheahin, Marc [mailto:Sheahin.Marc@epa.gov]
Sent: Tuesday, December 26, 2017 10:16 AM
To: Anna Armstrong <Anna@wagnerreg.com>
Subject: Application for EPA Reg.# 83529-OA - Confidential

Dear Ms. Armstrong,

My name is Marc Sheahin and I am a contractor with the EPA. I am contacting you in regards to your submission in support of Sharda Flumetsulam 80% WDG; ABN Reptile WDG (EPA Reg. Number: 83529-OA). We have found a few deficiencies with the submission that will need to be addressed:

1. Inert ingredients listed on the CSF were not found in the Agency database. Please refer to the attachment for more information.
   Note: The inert branch does not accept MSDS as support for the addition of inert ingredients.
2. The Formulator's Exemption form is missing a signature.
3. The Certification with Respect to Citation of Data is missing a signature.

Please send all necessary documents to this e-mail address by 01/04. After that date, please send directly to the PM. If you have any questions, please do not hesitate to contact me.

Thanks,
Marc Sheahin

Contractor, US EPA
2777 S. Crystal Drive, S-4811
Arlington, VA 22202
(703) 347-8686
Email: sheahin.marc@epa.gov

Sheahin, Marc

From: [redacted]
Sent: Wednesday, January 03, 2018 10:22 AM
To: Sheahin, Marc
Subject: 83529-OA – Sharda Flumetsulam 80% WDG
Attachments: [redacted]

Dear Mr Sheahin,
As requested by our customer, I send you here all information through the attached documents

We remain at your disposal for any further information

Thanks and kind regards

[redacted]

Inert ingredient information may be entitled to confidential treatment

Product ingredient source information may be entitled to confidential treatment

Inert ingredient information may be entitled to confidential treatment

Sheahin, Marc

From: Sheahin, Marc
Sent: Wednesday, January 03, 2018 12:05 PM
To: new_ingredient_code_requests; Debesai, Alganesh
Subject: Inert PC Request Form
Attachments: 83529-OA Inert PC Request Form.rtf; [redacted] Product Information Sheet.pdf; Sharda Flumetsulam 80% WDG CSF.pdf

Hello,

Please find an Inert PC Request Form, a CSF and a letter from the supplier in support of the addition of [redacted] into OPPIN.

Thank you,

Thanks,
Marc Sheahin

Contractor, US EPA
2777 S. Crystal Drive, S-4811
Arlington, VA 22202
(703) 347-8686
Email: sheahin.marc@epa.gov

Inert ingredient information may be entitled to confidential treatment

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

December 20, 2017

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

OPP Decision Number: D-536764
EPA File Symbol or Registration Number: 83529-OA
Product Name: Sharda Flumetsulam 80% WDG ABN: Reptile WDG
EPA Receipt Date: 15-Dec-2017
EPA Company Number: 83529
Company Name: SHARDA USA LLC

MS. ANNA ARMSTRONG
WAGNER REGULATORY ASSOCIATES, INC.
SHARDA USA LLC
PO Box 640, 7217 LANCASTER PIKE, SUITE A
HOCKESSIN, DE 19707-

SUBJECT: Receipt of Registration Application Subject to Registration Service Fee

Dear Registrant:

The Office of Pesticide Programs has received your application and certification of payment. If you submitted data with this application, the results of the PRN-2011-3 screen will be communicated separately. During the administrative screen, the Office of Pesticide Programs has determined that this Action is subject to a Pesticide Registration Service Fee as defined in the Pesticide Registration Improvement Act.
The Action has been identified as Action Code: R300
NEW PRODUCT;OR SIMILAR COMBINATION PRODUCT (ALREADY REGISTERED) TO AN IDENTICAL OR SUBSTANTIALLY SIMILAR IN COMPOSITION AND USE TO A REGISTERED PRODUCT;REGISTERED SOURCE OF ACTIVE INGREDIENT;NO DATA REVIEW ON ACUTE TOXICITY, EFFICACY OR CRP - ONLY PRODUCT CHEMISTRY DATA;CITE-ALL DATA CITATION, OR SELECTIVE DATA CITATION WHERE APPLICANT OWNS ALL REQUIRED DATA, OR APPLICANT SUBMITS SPECIFIC AUTHORIZATION LETTER FROM DATA OWNER;CATEGORY ALSO INCLUDES 100% RE-PACKAGE OF REGISTERED END-USE OR MANUFACTURING-USE PRODUCT THAT REQUIRES NO DATA SUBMISSION NOR DATA MATRIX;

No additional payment is due at this time.

If you have any questions, please contact the Pesticide Registration Service Fee Ombudsman at (703) 347-0510.

Sincerely,

Front End Processing Staff
Information Technology & Resources Management Division

Fee for Service {1013316,~

This package includes the following

- (•) New Registration
- ( ) Amendment

for Division

- ( ) AD
- ( ) BPPD
- (•) RD

[x] Studies? [ ] Fee Waiver?

[ ] volpay % Reduction: ___

Risk Mgr. 24

Receipt No. S- 1013316

EPA File Symbol/Reg. No. 83529-OA

Pin-Punch Date: 12/15/2017

This item is NOT subject to FFS action.

Action Code:

Requested: R300

Granted: R300

Amount Due: $ 1582

Parent/Child Decisions:

[ ] Inert Cleared for Intended Use [ ] Uncleared Inert in Product

Reviewer: J Herrick Date: 12/20/17

Remarks:

SIM CLINIC

S 1013316 Milestone Email anna@wagnerreg.com

Regulatory Type: Product Registration - Section 3

Application Type: New Registration

Company 83529 SHARDA USA LLC

Fee For Service ◉ Yes ○ No

Billable ◉ Yes ○ No

V

Print Letter

Enter More Information

Tracking

Risk Manager: Registration Division, Risk Management Team 24

Product #: 83529-OA Product Name: Sharda Flumetsulam 80% WDG ABN Reptile \

Me Too Section3:

Me Too Product Name

Application Date: 15-Dec-2017

Front End Date: 19-Dec-2017

FFS Due Date:

OPP Target Date:

OPP Rec'vd Date: 15-Dec-2017

Risk Manager Send Date

Negotiated Due Date

Receipt Content

Study

CSF

New Ingredient

View/Edit

Receipt Description

Portal submission pkg# 25156 PRIA R300 New registration

From: notification@pay.gov
To: Anna Armstrong
Subject: Pay.gov Payment Confirmation: PRIA Service Fees
Date: Friday, December 15, 2017 3:48:10 PM

Your payment has been submitted to Pay.gov and the details are below. If you have any questions regarding this payment, please contact Michael Yanchulis at (703) 347-0237 or yanchulis.michael@epa.gov.

Application Name: PRIA Service Fees
Pay.gov Tracking ID: 266J9SE8
Agency Tracking ID: 75383622151
Transaction Type: Sale
Transaction Date: 12/15/2017 03:48:04 PM EST

Account Holder Name: Cheryl R. Wagner

Transaction Amount: $1,582.00
Card Type: AmericanExpress
Card Number: **********2008

Registration Number:
Company Name: Sharda USA LLC
Company Number: 83529
Action Code: R300

THIS IS AN AUTOMATED MESSAGE. PLEASE DO NOT REPLY.

... ...verse before completi... ...n. Form Approved OM? No. 2070-0060 Approval expires 05-31-98

EPA United States **Environmental Protection Agency** Washington, DC 20460	✓	**Re... ...tration**	OPP Identifier Number
		Amendment	
		Other	

Application for Pesticide - Section I

1. Company/Product Number 83529-XX	2. EPA Product Manager Erik Kraft	3. Proposed Classification ☑ None ☐ Restricted
4. Company/Product (Name) Sharda USA LLC / Sharda Flumetsulam 80% WDG; ABN Reptile WDG	PM# 24	
5. Name and Address of Applicant *(Include Zip Code)* Sharda USA LLC c/o Wagner Regulatory Associates, Inc. P.O. Box 640 Hockessin, DE 19707 ☐ *Check if this is a new address*	6. **Expedited Review.** In accordance with FIFRA Section 3(c)(3)(b)(I), my product is similar or identical in composition and labeling to: EPA Reg. No. 62719-277 Product Name: Python WDG	

Section - II

☐ Amendment - Explain below.

☐ Resubmission in response to Agency letter dated ____________

☐ Notification - Explain below.

☐ Final printed labels in response to Agency letter dated ____________

☑ "Me Too" Application.

☐ Other - Explain below.

Explanation: Use additional page(s) if necessary. (For Section I and Section II.)
PRIA Code - R300

Section - III

1. Material This Product Will Be Packaged In:

Child-Resistant Packaging	Unit Packaging	Water Soluble Packaging	2. Type of Container
☐ Yes*	☐ Yes	☐ Yes	☐ Metal
☒ No	☒ No	☒ No	☒ Plastic
*** Certification must be submitted**	If "Yes" Unit Packaging wgt. / No. per container	If "Yes" Package wgt / No. per container	☐ Glass
			☐ Paper
			☐ Other (Specify) HDPE lined bags

3. Location of Net Contents Information	4. Size(s) Retail Container	5. Location of Label Directions
☒ Label ☐ Container	1 lb; 5 lbs; 10 lbs. 50 lbs; bulk	☒ On Label ☐ On Labeling accompanying product

6. Manner in Which Label is Affixed to Product

☐ Lithograph
☒ Paper glued
☐ Stenciled
☐ Other ____________

Section - IV

1. Contact Point *(Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)*

Name	Title	Telephone No. (Include Area Code)
Anna Armstrong	Agent for Sharda USA LLC	(302)-510-0039 (anna@wagnerreg.com)

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

2. Signature	3. Title Agent for Sharda USA LLC	6. Date Application Received **(Stamped)**
4. Typed Name Anna Armstrong	5. Date December 15, 2017	

This is a reproduction of EPA Form 8570-1 (Rev. 8-94) Previous editions are obsolete.

R 300 and 301

100% identical (repack): YES or (NO) (circle one)
{If **yes**, it's a 100% repack - then product chemistry, acute toxicity and efficacy data are not required}

Data on Group A and B must be submitted - Group A and B can not be cited.

Guideline No.	Group A: Product Chemistry Data Study Title	Data submitted	
		Yes	No
830.1550	Product Identity & Composition	✓	
830.1600	Description of materials used to produce the product	✓	
830.1650	Description of formulation process	✓	
830.1670	Discussion on the formation of impurities	✓	
830.1700	Preliminary analysis	✓	
830.1750	Certified limits (158.345)	✓	
830.1800	Enforcement analytical method	✓	

Guideline No.	Group B: Product Chemistry Data Study Title	Data submitted	
		Yes	No
830.6302	Color	✓	
830.6303	Physical State	✓	
830.6304	Odor	✓	
830.6314	Oxidation/Reduction (Chemical incompatibility)	✓	
830.6315	Flammability	✓	
830.6316	Explodability	✓	
830.6317	Storage stability	✓	
830.6319	Miscibility	✓	
830.6320	Corrosion Characteristics	✓	
830.6321	Dielectric Breakdown voltage	✓	
830.7000	pH	✓	
830.7100	Viscosity	✓	
830.7300	Density	✓	

R 300 and 301

New products must provide a bridging rationale document. The bridging document directs OPP to use a currently registered set of 6 acute toxicity data and label; instead of submitting product specific data.

Guideline No.	Acute toxicity (6 pack) Study Title	Cited	
		Yes	No
870.1100	Acute Oral (LD50)	✓	
870.1200	Acute Dermal (LD50)	✓	
870.1300	Acute Inhalation (LC50)	✓	
870.2400	Acute Eye Irritation	✓	
870.2500	Acute Dermal Irritation	✓	
870.2600	Dermal Sensitization	✓	

Efficacy – which guideline depends on the proposed label use and they must cite the data to be used for the bridging rationale.

Guideline No.	Efficacy Study Titles	Cited		Comments
		Yes	No	
810.3100	Soil Treatments for Imported Fire Ants			
810.3200	Livestock, Poultry, Fur and Wool-Bearing Animal Treatments			
810.3300	Treatments to Control Pests of Humans and Pets			
810.3400	Mosquito, Black Fly, and Biting Midge (Sand Fly) Treatments			
810.3500	Premises Treatments			
810.3600	Structural Treatments			
810.3800	Methods for Efficacy Testing of Termite Baits			

N

Pages 66-73 Confidential Statement of Formula may be entitled to confidential treatment

INERT CLEARANCE STATUS FORM

Reviewer Name: Marc Sheahin			Request Date: 12/26/2017
Tel: 703-347-8686	ISB	CUBE: S-4811	MAIL CODE: 7502P

A. COMMENTS:

Inert Issue: You may supply the letter of approval from the supplier or remove from the CSF and send a revised draft of all CSFs that have this inert listed

B. PESTICIDE PRODUCT INFORMATION:

Receipt Number: 1013316	Date on CSF: 12/15/2017	Food-Use Pesticide: [X] Yes [] No
EPA Reg. No/File Symbol: 83529-OA	Formulation: Basic	

C. INGREDIENT INFORMATION:

Ingredient No.1	Tolerance Exemption(s)[1] 910	920	930	940	950	960
Chem. Name:						
Trade Name: [redacted]						
[redacted]						

Comments: Not found in the Agency database. Please provide full compositional information including the manufacturer constituent names, CAS numbers, and weight/weight percent composition and a letter of approval from the supplier.

Reviewer Name: Marc Sheahin **Review Date: 12/26/2017**

Inert ingredient information may be entitled to confidential treatment

[1] *Language from the Code of Federal Regulations (40 CFR 180, subpart D):*
40 CFR 180.910: Inert ingredients used pre- and post-harvest; 40 CFR 180.920: Inert ingredients used pre-harvest; 40 CFR 180.930: Inert ingredients applied to animals; 40 CFR 180.940: Tolerance exemptions for active and inert ingredients for use in antimicrobial formulations; 40 CFR 180.950: Tolerance exemptions for minimal risk active and inert ingredients; and 40 CFR 180.960: Polymers.

Inert Front Office Form 3